

Mobile Bay to Mississippi River

This chapter describes the coasts of Alabama, Mississippi, and Louisiana bordering the Gulf of Mexico from Mobile Bay to the Mississippi River and the numerous bodies of water emptying into the Gulf, including Breton Bay, Mobile Bay, Mississippi Sound, Lake Borgne, Lake Pontchartrain, Chandeleur Sound, Breton Sound, and their tributaries. Also discussed are Mobile, Pascagoula, Biloxi, and Gulfport, and other smaller ports and landings.

The Intracoastal Waterway for this section of the coast is described in chapter 12.

COLREGS Demarcation Lines

The lines established for this part of the coast are described in 80.815, chapter 2.

Weather

The warm, temperate climate of the coast from Mobile Bay to the Mississippi River is influenced by the Gulf of Mexico, which is partly responsible for the warm, humid summers and the relatively mild winters. During spring and summer, the Bermuda High generates moist SE to S winds that keep the temperatures cooler than those farther inland and also aids in thunderstorm development. Cold continental air pushes far enough S in winter to occasionally drop temperatures below freezing and even produce some snow. Cold spells usually last about 3 days.

About 15 to 20 significant frontal systems penetrate the Gulf of Mexico each year, bringing cool air and strong N winds. The collision of this air with the warm air to S sometimes generates strong low pressure systems. This pattern continues until the Bermuda High begins to exert its influence in spring. At sea, gales blow about 1 percent of the time from November through March, while waves of 8 feet or higher are encountered 4 to 6 percent of the time. Fog is also a problem in winter and spring, particularly when warm air invades the region and moves over relatively cooler water. Near shore, visibilities drop below 2 miles from 2 to 7 percent of the time from December through April; January and March are the worst months.

While tropical cyclones can affect this coast at any time, late May to early November is considered the hurricane season. A tropical cyclone (tropical storm or hurricane) moves across this stretch of coast every other year, on the average, while the hurricane frequency is about once in 5 years. Intense hurricanes can generate 175-knot winds, 40-foot seas, tides 10 to 25 feet above normal, and 15 inches of rain. Of all the storms that have affected this coast, about 45 percent occurred in September; about one-half of these were hurricanes. Most tropical cyclones approach from SE through SW. The two most devastating storms to hit this coast in recent years were hurricanes Camille, in September 1969, and Frederic, in September 1979.

Charts 11376, 11378

Mobile Bay, 40 miles W of Pensacola and 90 miles NE of South Pass, Mississippi River, is the approach to the city of Mobile and to the Alabama and Tombigbee Rivers. The bay has depths of 7 to 12 feet outside the dredged channels. The entrance is 3 miles wide between Mobile Point on the E and Pelican Point on the W, but most vessels will prefer to follow the dredged channel rather than chance passage between the breakers and shoals that extend 4 miles S on both sides.

Shipping Safety Fairways

Vessels should approach Mobile Bay through the prescribed Safety Fairways. (See 166.100 through 166.200, chapter 2.)

Prominent features

The general appearance of the land is a guide to finding the entrance to Mobile Bay. For a distance of 40 miles E of the entrance, the shore, although low, is wooded and unbroken. For 50 miles W of the entrance there is a chain of islands which, although wooded in places, is generally low and bare.

The most conspicuous landmark near the entrance is the 131-foot black conical tower (30°11.3'N., 88°03.0'W.), which was the base for the former Sand Island Light.

Fort Morgan, an historic State shrine, is on Mobile **Point** on the E side of the entrance. The walls of this old brick pentagon-shaped fort are conspicuous when approaching the entrance. Mobile Point Light $(30^{\circ}13'42"N., 88^{\circ}01'30"W.)$, 125 feet above the water, is shown from a skeleton tower. Mobile Point Range Rear (12) The concrete gun emplacements of later fortifications E of the old fort are also conspicuous.

Fort Gaines, an historic landmark and museum on the E end of Dauphin Island, is on the W side of the entrance. A spherical elevated tank is 2 miles W of the

COLREGS Demarcation Lines

The lines established for Mobile Bay are described in **80.815**, chapter 2.

Channels

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Main Ship Channel, the entrance or bar channel, (15) leads from the Gulf between Southeast Shoal and Mobile Point on the E and Sand Island and West Bank on the W. Federal project depth is 47 feet over the bar. (See Notice to Mariners and latest editions of charts for controlling depths.) In addition to the dredged channel across the bar, the natural channel has depths of 18 feet or more. Inside the bar, depths in the channel increase to as much as 56 feet, with a least width of 500 yards between the shoals which rise abruptly from deep water. The wreck of the MAGNOLIA, on the E side of the channel 0.7 mile SW of Mobile Point, is marked by a lighted buoy. The channel is marked by lighted buoys and a 020°55' lighted range on Mobile Point. The rear range light is on the same structure and below Mobile Point Light.

From W, boats drawing up to 6 feet can enter Mobile Bay via Pelican Passage and Pelican Bay, only with local knowledge, owing to the shifting character of the bottom. The channel passes between the shoal SE of Pelican Passage and Dauphin Island, thence E into Pelican Bay. The best water can be found by passing to the S of **Dauphin Island Spit** before shaping a course N into Mobile Bay.

From E, only about 3 feet can be taken across (17) Southeast Shoal around Mobile Point. It is necessary to pass very close to shore; the passage should only be attempted under most favorable weather conditions and with local knowledge. The channels shift frequently.

Mobile Bay Channel extends from the lower anchorage off Fort Morgan through Mobile Bay to Mobile River. Federal project depth is 40 feet to and in a turning basin off **Magazine Point** at the head of Mobile Ship Channel. Although the channel is subject to shoaling, the project depth is generally maintained. (See Notice to Mariners and latest editions of charts for controlling depths.) The channel is well marked with lighted ranges, lights, and lighted and unlighted buoys.

The Coast Guard advises vessels exercise particular caution where the channel intersects the Intracoastal Waterway, about 3 miles above Mobile Point at Lighted Buoys 25 and 26. Situations resulting in collisions, groundings, and close quarters passing have been reported by both shallow and deep-draft vessels. The Coast Guard has requested vessels make a **SECURITE** call on VHF-FM channel 13 prior to crossing the Intracoastal Waterway, particularly during periods of restricted visibility.

The secondary and other channels are covered geographically under their respective headings.

Anchorages

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Vessels should anchor in the Mobile Bay Anchorage, S of and between the safety fairways. (See 166.100 through 166.200, chapter 2.) The best anchorages in the lower bay for deep-draft vessels are found N and NW of Mobile Point in depths ranging from 20 to 45 feet with excellent holding ground. This anchorage is secure, but during a norther a short heavy choppy sea is raised which may be uncomfortable for small vessels. A circular explosives anchorage is just N of Mobile Point. (See 110.1 and 110.194, chapter 2, for limits and regulations.) A general anchorage for unmanned and other nondescript vessels is near Cedar Point. (See 110.1 and 110.194a, chapter 2, for limits and regulations.)

Vessels are not permitted to anchor in the Bar (22) Channel, Mobile Bay Channel, or Mobile River Channel.

In emergencies, light-draft vessels can anchor in Mobile River above Cochrane (U.S. Route 90) highway bridge with permission of the harbormaster.

Small boats sometimes anchor N and E of Fort Morgan in Navy Cove. Several piles and other obstructions are in this locality.

Dangers

Shoals extend about 4.5 miles S and W of Mobile Bay entrance. Southeast Shoal, covered 3 feet, is on the E side of the Bar Channel, and Sand Island Shoal, covered 1 foot, and West Bank, covered 3 feet, are on the W side.

The wreck of the Civil War vessel TECUMSEH is N of Mobile Point Light in 30°13'47.5"N., 88°01'37.5"W. The wreck is marked by a buoy with orange and white bands. The vessel is reported to be in an unstable condition, and ammunition and powder aboard the wreck could be detonated if the vessel shifts. Mariners are cautioned not to anchor in the area of the buoy and to reduce speed producing as little wake as possible when transiting Mobile Channel between Buoys 15 and 17.

A nearly continuous spoil bank extends along ei-(27) ther side of the bay channel from just inside Mobile Bay entrance to the mouth of Mobile River. Through these

spoil banks are several charted openings for passage to various points in Mobile Bay.

Fish havens, consisting of concrete pipe, lie within a 3.5-mile-square area which extends offshore from 2.7 miles to 6.2 miles E of Mobile Point.

Fish havens, consisting of old automobile bodies lashed together, scrap iron, and concrete, have been or may be established on the bottom along the 10-fathom curve off the Alabama coast. While they are not dangerous and are reported to have a minimum depth of 10 fathoms over them, vessels are advised not to anchor in their vicinity.

Ferry

Scheduled daytime ferry crossings are frequent be-(30) tween Fort Gaines and Fort Morgan. The ferries monitor VHF-FM channel 16.

Tides and currents

The tides are chiefly diurnal and the rise and fall is very small, averaging 1.2 feet at Mobile Point and 1.5 feet at Mobile. During the winter, northers may depress the water surface as much as 1.5 feet below mean low water, while hurricanes have been known to raise the level as much as 11.5 feet. (See the Tide Tables for daily

In this area strong winds have considerable effect in modifying the times and velocities of the current; in using the tables, allowance should be made for such effects. (See the Tidal Current Tables for daily predictions of current in Mobile Bay entrance and other locations in Mobile Bay.)

The tidal current near the outer end of the Main Ship Channel is rotary. Both the flood and ebb currents set somewhat to the left of the channel direction before reaching their strength, and to the right of the channel direction after the times of strength. During 3 days of current observations at this location there was an outflow of 0.5 knot average velocity combined with the tidal current.

It has been reported that velocities of 8 to 10 knots have been observed in the Bar Channel and Mobile Bay Channel on the runoff of the ebb after protracted periods of strong S winds. Low-powered and deep-draft vessels should be guided by the advice of the pilots under these conditions.

Weather

The climate of Mobile Bay is influenced by the waters of the N Gulf of Mexico and of the bay itself. While summers are warm, the heat is tempered by the ocean and bay breezes. Temperatures climb to 90°F or above on about 75 days each summer, compared to 80 days just a few miles inland. During winter, the waters help moderate the colder temperatures. Minimums fall below freezing on about 21 days each season, compared to 20 to 25 days, on average, inland. The annual average temperature at Mobile is 67.6°F with an average high of 77.4°F and an average low of 57.4°F. January is the coolest month with an average temperature of 50.9°F while July is the warmest month with an average temperature of 82.2°F. The warmest temperature on record is 104°F recorded in July 1952 while the coolest temperature on record is 3°F recorded in January 1985. Precipitation is moderate averaging about 66 inches in any given year. The wettest month is July averaging nearly eight inches and the driest month is October which averages about three inches. Thirty percent of the average annual rainfall occurs during the summer months of June, July, and August. Cold snaps usually last about 3 days, and occasionally they will bring some snow flurries. Overall, snowfall is light and averages less than one inch in any given year. The greatest 24-hour snowfall occurred in February 1973 when 3.6 inches accumulated. The winds behind these fronts sometimes blow for an extended period and are known as "northers". If they persist, they can lower the water in the bay and this can interfere with the deeper draft vessels bound through the dredged channel.

In addition to these northers, strong winds and rough seas on the bay are generated by extratropical storms, thunderstorms, and tropical cyclones. While gale-force winds are infrequent, winds in the 17- to 33-knot range occur about 5 to 10 percent from November through May. March and April are often the windiest months. Thunderstorm winds are usually in the form of gusts and can reach 50 to 60 knots. Frontal thunderstorms, which are usually the most severe, can occur in any month and are most likely in spring. Air mass thunderstorms are most frequent in summer; during June, July, and August, thunderstorms are observed on about 10 to 17 days per month, often in the afternoon. The strongest winds are generated by hurricanes, except for those in a rare tornado. Hurricane winds have reached 175 knots along the N Gulf coast.

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While a tropical cyclone may be expected to affect this region about every 2 years on average, destructive storms have been infrequent on Mobile Bay during this century. Nine tropical storms have come within 50 miles of Mobile Bay since 1950. In September 1979, hurricane Frederic, generating 115-knot sustained winds and a 12-foot storm tide, became the first hurricane since 1926 to directly strike Mobile. During the storm, Dauphin Island reported gusts to 126 knots.

Tropical cyclones are a threat from late May through early November, while September is the most active month. Most storms approach the area from SE through SW. They are often in the process of recurving (41)

and intensifying before moving inland. Mobile Bay is protected by Dauphin Island to the W and banks and shoals to the E. However, during southerly gales it is not usually safe for vessels of over 25-foot draft to attempt to cross the bar.

Visibilities may be briefly restricted to near zero in heavy showers or thunderstorms throughout the year. However, fog is more persistent and is most likely in winter and spring when warm air from S occasionally moves across relatively cooler waters. During this period, it is associated mainly with SE and S winds. From November through April, visibilities fall below 0.5 mile on 4 to 8 days per month. Conditions are usually worst during the late night and early morning hours, improving during the early afternoon.

The National Weather Service maintains offices in Mobile. **Barometers** may be compared at these offices or by telephone. (See appendix for addresses.)

(See page T-6 for **Mobile climatological table.**)

Pilotage, Mobile and Mobile Bay

Pilotage is compulsory for all foreign vessels and U.S. vessels under register in foreign trade. Pilotage is optional for coastwise vessels that have on board a pilot licensed by the Federal Government.

The Mobile Bar Pilots Association maintains a station on Dauphin Island and operates two pilot boats, ALABAMA and MOBILE PILOT, based at Fort Gaines. The boats have gray hulls and white superstructures with blue trim and the word PILOT on each side of the wheelhouse. The boats monitor VHF-FM channels 13 and 16, and the station monitors channel 16. The pilot boats and harbor tugs are interconnected with the harbormaster's office on the intraport radiotelephone system, VHF-FM channel 65A. The pilots board vessels day or night in the vicinity of Mobile Entrance Lighted Horn Buoy M (30°07'30"N., 88°04'06"W.). For boarding, the pilots request that the pilot ladder be rigged 6 feet above the water on the lee side of the vessel.

Pilots can be ordered by telegraph (cable address: MOBARPI). bν telephone (334-432-2639 or 334-432-2630), by radiotelephone through the Mobile Marine Operator, or through ships' agents. The pilots request a 48-hour advance notice of arrival and a 1½-hour notice of sailing.

Bon Secour Bay, extending about 14 miles E of Mobile Bay entrance, has depths of 5.6 to 11.7 feet in October 2002. Oyster beds are very extensive along the NE shore of the bay. The bay is the route of the Intracoastal Waterway, which crosses Mobile Bay Channel at a point 2.6 miles N of the latter's entrance. The waterway is described in chapter 12. A marina on the N side of Mobile Point about 0.8 mile E of Fort Morgan provides berths with water and electricity, gasoline,

diesel fuel, ice, a launching ramp, wet and dry storage, marine supplies, pump-out station and a 20-ton lift. The approach to the facility is marked by private daybeacons and was reported navigable by craft drawing 8 feet or less in May 1982.

Bon Secour River empties into the E part of Bon Secour Bay. A dredged channel leads from the Intracoastal Waterway through Bon Secour Bay and into Bon Secour River, a total distance of 3.9 miles. There are two turning basins on the S side of the river at miles 1.6 and 2.5, respectively. In October 2004, the controlling depth was 6.2 feet (7.2 feet at midchannel) to Daybeacon 30, thence 5 feet (5.6 feet at midchannel) to Daybeacon 38; thence in May 2004, 2.0 feet (5.2 feet at midchannel) to the head of the project. In 1999, depths of 6½ to 10 feet were available in both turning basins. The channel is marked by a light and daybeacons. In May 1982, it was reported that a depth of 4 feet could be carried for about 1.3 miles above the dredged channel.

About 1 mile above the mouth, an unnamed arm of water leads S from Bon Secour River to shallow Oyster Bay. A fixed highway bridge crossing the arm limits navigation to the S to skiffs only.

The town of Bon Secour is on the N side of Bon Secour River about 1.5 miles above the mouth.

Small-craft facilities on the E side of the arm leading to Oyster Bay and at the town of Bon Secour can provide berths, gasoline, diesel fuel, water, ice, marine supplies, launching ramps, storage, and hull and engine repairs. The largest marine railway, at a boatyard on the E side of the arm leading to Oyster Bay, about 0.4 mile N of the fixed highway bridge, can handle craft to 80 feet. A channel marked by private stakes, with a reported depth of 7 feet in May 1982, leads to the boatyard.

Chart 11376

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Weeks Bay, on the E side of Mobile Bay about 6.8 miles NW of Bon Secour River, has an average depth of 2 to 5 feet. A marked channel, with a reported controlling depth of about 4 feet in May 1982, leads through the entrance and across the bay to Fish River. About the same depth can be carried into Magnolia River on the E side of the bay.

The approach to the bay is marked by a light about 1 mile W of the entrance. An overhead power cable with a clearance of 56 feet crosses the bay at the entrance.

Small boats go to Marlow on Fish River and Magno**lia Springs** on Magnolia River. State Route 98 highway bridge over Fish River at **Yupon** has a fixed span with a clearance of 35 feet. A small marina on the W side of the

river just below the bridge has berths, gasoline, diesel fuel, water, electricity, ice, some marine supplies, and a launching ramp.

State Route 32 highway bridge crossing Fish River at Marlow, about 5.5 miles above the mouth, has a fixed span with a clearance of 22 feet. A marina on the W side, a short distance below the bridge, has berths, electricity, gasoline, water, ice, some marine supplies, and a launching ramp.

East Fowl River enters the W side of Mobile Bay about 13.8 miles N of the bay entrance. It extends generally SW. The entrance is marked by lights and daybeacons. In January 2004, the controlling depth was 6.5 feet from the entrance in Mobile Bay to the head of the project about 1 mile about the mouth. Above this point, the reported controlling depth was 2 feet to West Fowl River in May 1982; local knowledge is advised. State Route 163 highway bridge, about 0.5 mile above the mouth of the river, has a 43-foot fixed span with a clearance of 24 feet. An overhead power cable with a clearance of 47 feet crosses the channel connecting with West Fowl River at about 30°23'53"N., 88°08'39"W. A marina on the N side of East Fowl River just E of the bridge has berths with water and electricity, gasoline, diesel fuel, ice, a launching ramp, limited marine supplies, and a pump-out station. East Fowl River leads into West Fowl River, and thence into Fowl River Bay; these are discussed later in this chapter.

Fowl River, the NW branch, joins East Fowl River about 2 miles above the mouth. It is navigable for about 3 miles by small craft with local knowledge. An overhead power cable with a reported clearance of 52 feet crosses Fowl River about 2.5 miles above the mouth in about 30°27.0'N., 88°08.4'W.

Great Point Clear is on the E side of the bay about 16 miles N of the entrance; a light marks the shoals extending W from the point.

Point Clear, Battles Wharf, Seacliff, and Daphne are summer resorts along the E shore. Many of the numerous boat landings are in ruins and constitute a danger to small boats navigating close inshore. A large hotel on Great Point Clear has a prominent water tank. A privately dredged channel with a reported controlling depth of 5½ feet in July 1999. The channel, marked by private lights and daybeacons, leads to a yacht basin at the hotel. Berths, electricity, gasoline, diesel fuel, and water are available at the basin.

Fairhope, on the E side of the bay about 17.6 miles above the entrance, is a town with bus connections. There is a 1,450-foot municipal pier at the town. A channel marked by private daybeacons, with a reported approach depth of 9 feet and alongside depth of 5 feet in March 2005, leads to a marina in a basin adjoining the N side of the pier. Gasoline, water, ice, electricity, and a

launching ramp are available. In 2005, the marina was reported to be temporarily closed. Fairhope Yacht Club is located in Fly Creek, N of the municipal pier. A dredged channel leads E from Mobile Bay to a turning basin about 0.1 mile above the mouth of the creek. In September 2004, the controlling depth in the channel was 5.5 feet (6.0 feet at midchannel) and 6.0 feet in the turning basin. An overhead power cable, NE of the turning basin, has a reported clearance of 48 feet. The entrance to the channel is marked by a light. A municipal fish dock, on the W side of Fly Creek about 0.3 mile above the entrance, can provide gasoline and diesel fuel. Marinas on the creek can provide berths with water and electricity, gasoline, diesel, and marine supplies. Lifts to 36 tons can handle craft for hull, engine, and electronic repairs.

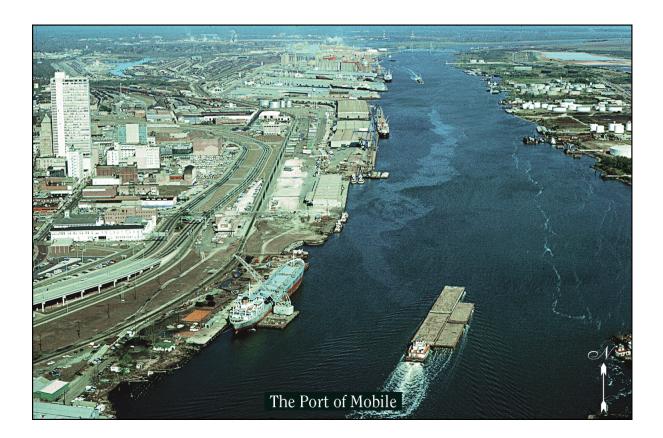
Fairhope Yacht Club race course, W of Fly Creek and about 2.2 miles in diameter, is marked by private daybeacons.

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Theodore Ship Channel leads from a point in Mobile Bay Channel about 15 miles N of the entrance NW for 4.5 miles to an anchorage area and thence through a 1.5-mile landcut to a turning basin at an industrial park. The Federal project depth is 40 feet to and in the turning basin. The channel is marked by lights and a 123°35' lighted range. The S side of the anchorage area is marked by daybeacons. (See Notice to Mariners and latest edition of the chart for controlling depths.) A barge channel extends 1.2 miles from the head of the turning basin. In January 2004, the controlling depth was 7.9 feet (10.5 feet at midchannel). A fixed highway bridge with a clearance of 45 feet crosses the barge channel about 0.15 mile above the turning basin. An overhead power cable close W of the bridge has a clearance of 73 feet. In 1983, it was reported that a bulkhead on the N side of the turning basin had partially collapsed; caution is advised.

Dog River, emptying into the W side of Mobile Bay at a point about 21 miles N of the entrance, is used considerably by yachts and small boats. A channel marked by daybeacons and lights leads NW from a point in Mobile Bay Channel about 1.3 miles above Hollingers Island Channel to the mouth of Dog River. In Janaury 2004, the controlling depth was 6.7 feet (7.0 feet at midchannel) to the highway bridge across the mouth of Dog River, thence in 1982, depths of 3½ feet were reported from the mouth upstream for about 7 miles to the CSX railroad bridge. State Route 163 highway bridge crossing the mouth of Dog River has a fixed span with a clearance of 73 feet. The railroad bridge 7 miles above the mouth has a 22-foot fixed span with a clearance of 8 feet.

There are several small-craft facilities on the river at which berths, electricity, gasoline, diesel fuel, water,



ice, storage, and marine supplies are available; hull, engine, and electronic repairs can be made. A 15-ton mobile hoist at a marina in a dredged basin on the N side of the river just above the highway bridge can handle craft up to 42 feet.

Along the W shore of the bay, N and S of Dog River, there are numerous small-craft landings; many, however, are in ruins.

Mobile, 28 miles N of the bay entrance, is one of the largest and most important seaports on the Gulf of Mexico. A fully equipped ocean terminal, excellent transportation facilities, large shipyards, and all kinds of marine supplies are available at Mobile. Principal foreign exports are marine supplies, paper products, lumber, wood pulp, flour, aluminum, chemicals, grain, soybeans, coal and bunker oil, iron and steel products, and fertilizer. The principal foreign imports are bauxite, mahogany, crude rubber, sugar, newsprint, seafood, rubber, pig iron, ores, molasses, automobiles, fishmeal, frozen foods, and chemicals. The coastwise trade consists mainly of petroleum products, shell, lumber, iron and steel products, chemicals, and food products. Inland waterway transportation facilities for handling iron and steel products, ore, sugar, grain, and coal serve the Warrior, Tombigbee, and Alabama River systems with connections to the Mississippi River.

Prominent features

From about the center of the bay, the industrial complex on Hollingers Island and the battleship ALABAMA moored at the entrance to Tensaw River are conspicuous. On nearing the city, the 33-story First National Bank Building and other tall buildings near the waterfront are first seen. Next seen are the water tanks NW of Garrows Bend. At night, the fixed red lights on the water tank at Great Point Clear are visible from Mobile Bay Channel. An aviation light at Brookley Field, S of Mobile, and the occulting red lights on the radio towers at the mouth of Tensaw River are prominent.

Channels

Main Ship Channel, the dredged bar channel, and Mobile Bay Channel leading from the entrance to Mobile River Channel were discussed earlier in this chap-

From a point 25.7 miles N of the bay entrance, (67) Arlington Channel, a dredged channel, leads WNW from Mobile Bay Channel to a turning basin in the W part of Garrows Bend. In July 2004, the controlling depth was 10.8 feet (19.0 feet at midchannel) with 11.6 to 20.4 feet in the turning basin. The channel is marked by a 289.3° lighted range, lights, buoys and daybeacons.



Coast Guard

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Mobile Coast Guard Station is at the W end of the channel.

Garrows Bend Channel, a dredged channel, leads NE from the turning basin to a causeway between McDuffie Island and the mainland. In December 2004, the controlling depth was 5.9 feet (6.2 feet at midchannel) in the channel about 0.3 mile above the turning basin, thence 2.3 feet to the causeway.

Mobile River Channel extends from Mobile Bay Channel for 4 miles to the bridge at St. Louis Point. Federal project depths are 40 feet from the mouth of the river to and inside Mobile Turning Basin, thence 40 feet to St. Louis Point, and thence 25 feet to the mouth of and in Chickasaw Creek for about 2 miles to just below Shell Bayou entrance. (See Notice to Mariners and latest editions of charts for controlling depths.) In 1982, it was reported that Mobile-Chickasaw Port Facility, Inc., was maintaining Chickasaw Creek to a depth of 37 feet from St. Louis Point to Shell Bayou.

Threemile Creek leads W from Mobile River Channel just S of **Magazine Point.** About 0.6 mile above the creek entrance, Industrial Canal leads S for about 1 mile. Depths of about 9 feet can be carried in the creek to the canal, thence 12 feet in the canal. Chemicals, seafood, cement, gypsum, sand and gravel, lumber, chemical plants, and oil terminals are on the canal. The large bulk material handling plant of the Alabama State Docks, with over 1,600 feet of berthing space in 40 feet, is on the south side of the entrance to Threemile Creek. (See Wharves.)

The old ship channel around the S end of **Pinto Is**land, which leads to Tensaw River, had a controlling depth of 8 feet in 1972. The channel is unmarked.

Anchorages

In emergencies, light-draft vessels may anchor in (73) Mobile River above Cochrane (U.S. Route 90) highway bridge crossing at St. Louis Point with the permission of the harbormaster.

Bridges

There are no bridges over the main channel from the Gulf to the State docks. Above the docks, at St. Louis Point, Mobile River is crossed by Cochrane (U.S. Route 90) fixed highway bridge; the vertical clearance is 140 feet. Just above the Cochrane bridge, at the mouth of Chickasaw Creek, is the CSX railroad bridge with a swing span with a clearance of 6 feet; the channel is through the S draw. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197. (See 117.1 through 117.49, chapter 2, for drawbridge regulations.)

A CSX railroad bridge with a swing span with clear-(75) ance of 4 feet crosses the Mobile River about 1.5 miles (76)

above Twelvemile Island. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197.

Twin fixed highway bridges with clearances of 125 feet cross the river about 18 miles above the mouth.

Five bridges cross Threemile Creek below the fixed highway bridge at the head of navigation. The first, CSX railroad bridge, has a swing span with a clearance of 10 feet. The channel is through the N draw. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197. The second, the Alabama Terminal Docks railroad bridge, has a bascule span with a clearance of 6 feet. In the open position, the draw overhangs the channel above a height of 59 feet. Beyond the Industrial Canal are the U.S. Route 43 highway and the Southern railway bridge with swing spans having a minimum clearance of 1 foot. The channel is through the N draw. (See 117.1 through 117.59 and **117.115**, chapter 2, for drawbridge regulations.) About 0.15 mile below Route 43 highway bridge, an overhead power cable crosses with a clearance of 53 feet. About 0.4 mile above the Southern railway bridge, the Gulf, Mobile, and Ohio railroad bridge has a fixed span with a clearance of 12 feet.

Twin highway tunnels cross under Mobile River between Mobile and Blakeley Island about 1.5 miles above McDuffie Island.

Weather and pilotage information for Mobile is discussed earlier in this chapter.

Towage

Diesel-powered tugs and oceangoing tugs up to (80) 4,000 hp are available at Mobile.

Quarantine, customs, immigration, and agricultural quarantine

(See chapter 3, Vessel Arrival Inspections, and ap-(81) pendix for addresses.)

Quarantine laws are enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) Mobile has several hospitals and clinics.

Mobile is a customs port of entry. (83)

Coast Guard

A Marine Safety Office is at Mobile. (See appendix for address.)

Harbor regulations

The Alabama State Docks Department has jurisdiction over the bay, harbor, and that part of all the tributary streams in which the tide ebbs and flows, and extends to the outer shoal 5 miles SSW of Fort Morgan at the entrance to the harbor. It has supervision over harbor pilotage, State wharves and shipping, as well as authority in all matters relating to the arrival, departure, loading, and discharging of all vessels at State wharves. Most routine functions are administered through the harbormaster.

The harbormaster controls all of the waterway traffic in the area, assigns berths, and enforces the rules and regulations of the port. Ships are normally taken to their berths by the bar pilots, but any subsequent shifting or redocking of vessels in the harbor is done by the harbormaster and his deputies. The harbormaster's office is in the Administration Building at the State Docks and is connected by the intraport radiotelephone system with all pilot boats and tugs on VHF-FM channels 16 and 65A. The harbormaster can be reached by telephone (334-441-7251).

Speed limit

(87)

No vessel, except launches, shall exceed 6 m.p.h. in the inner harbor between Mobile Channel Light 76 to and including Chickasaw Creek, and shall take all possible precautions to prevent disturbance of vessels berthed at marginal wharves.

Wharves

The Port of Mobile has more than 150 piers and wharves, most of which are located on both sides of the Mobile River between the mouth and the confluence with Chickasaw Creek about 4 miles above the mouth. Facilities are also on Theodore Industrial Park Ship Canal, Arlington Channel, Threemile Creek, Industrial Canal, Chickasaw Creek, Hog Bayou, and Black Bayou.

The facilities on the W side of the Mobile River are generally for handling cargo, while the facilities on the E side are service and industry related. Only the deep-draft facilities are described. For a complete description of the port facilities refer to Port Series No. 18, published and sold by the U.S. Army Corps of Engineers. (See appendix for address.) The alongside depths of the facilities described are reported; for information on the latest depths contact the Alabama State Docks Department or the private operators. All deep-draft facilities have rail and direct highway connections, and almost all have water and electrical shore power connections.

General cargo at the port is usually handled by ship's tackle; special handling equipment, if available, is mentioned in the description of the particular facility. Floating cranes to 110 tons are available.

In the port area, the Alabama State Docks Department and private companies operate warehouses and transit sheds having a total of more than 3 million square feet of dry storage space. About 36 acres of open storage space is available.

Facilities on Mobile River, W side:

(92)

(93)

Alabama State Docks Department, McDuffie Terminal, Ship Wharf No. 1 (30°39'13"N., 88°01'58"W.): 1,015 feet of berthing space with dolphins; 45 feet alongside; deck height, 15½ feet; one traveling gantry shiploader with 96-foot conveyor boom, served by a 72-inch electric belt conveyor; loading rate, 2,000 to 3,200 tons per hour; shipment of coal by vessel; bunkering vessels; mooring bunkering vessels; owned and operated by the Alabama State Docks Department.

Alabama State Docks Department, McDuffie Terminal, Ship Wharf No. 2 (30°39'25"N., 88°01'58"W.): 1,050 feet of berthing space; 45 feet alongside; deck height, 15 feet; one traveling gantry shiploader with 222-foot boom conveyor having 105-foot outboard reach, served by a 96-inch conveyor system; maximum loading rate 4,500 tons per hour; receipt and shipment of coal by vessel; bunkering vessels; owned and operated by the Alabama State Docks Department.

Alabama State Docks, Pier No. 4 (30°40'00"N., 88°02'05"W.): lower side, 475 feet long, 25 feet alongside; upper side, 495 feet long, 35 feet alongside; deck heights, 9 feet; electric derrick with 36-foot booms; one hand-operated derrick with two 20-foot booms; pipelines extend from pier to storage tanks; receipt of liquid fertilizer; receipt and shipment of petroleum products; mooring company-owned floating equipment; owned by the Alabama State Docks Department and operated by Radcliff/Economy Marine Services, Inc.; PM Ag Products, Inc.; McKenzie Tank Lines Corp.

Oil Recovery Co. of Alabama, Mobile Terminal Pier (30°40'08"N., 88°02'04"W.): S side, 630 feet long, 5 to 38 feet alongside; N side, 630 feet long, 12 to 38 feet alongside; deck height, 12 feet; mooring company-owned floating equipment; mooring barges for fleeting; owned by Mobile River Properties L.L.C. and operated by Oil Recovery Co., Inc. of Alabama.

Mobile River Terminal Co., Ship Pier (30°40'13"N., 88°02'09"W.): S side, 255 feet long, 12 feet alongside; N side, 1,000 feet long, 42 feet alongside; deck heights, 10 feet; receipt of iron, manganese, and fluorspar ores, and other dry bulk materials; owned by Warrior & Gulf Navigation Co., and operated by Mobile River Terminal Co., a subsidiary of Warrior & Gulf Navigation Co.

Alabama State Docks, Berths 2 through 8, Piers A through D, and Bulk Material Handling Plant; owned and operated by the Alabama State Docks Department. These docks form a modern port terminal, open to all users alike. The facilities include many concrete wharves, fireproof shipside transit sheds and covered warehouse space, grain elevators, bonded general cargo warehousing, terminal rail connections, and numerous auxiliary facilities. The largest crane at the terminal is a 100-ton stiff-leg derrick. Floating cranes up

to 80-ton capacity are also available, as are smaller cranes, lift trucks, trailers, and conveyors.

Berth 2 (30°41'41"N., 88°02'16"W.): 989 feet of (99) berthing space; 40 feet alongside; deck height, 11 feet; receipt and shipment of containerized and conventional general cargo in foreign and domestic trades.

Berths 3, 4, and 5 (30°41'53"N., 88°02'18"W.): 1,505 feet of berthing space; 40 feet alongside; deck height, 11 feet; receipt and shipment of conventional general cargo in foreign and domestic trades, steel and forest products, and heavy-lift items.

Berths 6, 7, 8 (30°42'05"N., 88°02'20"W.): Berths 6 (101) and 7 are 1,138 feet long; Berth 8 is 584 feet long; roll-on/roll-off is 130 long; deck heights, 11 feet; receipt and shipment of conventional and roll-on/roll-off general cargo in foreign and domestic trades, steel and forest products, and heavy-lift items.

Pier A, South Wharf (30°42'15"N., 88°02'24"W.): N (102) side of Slip A, 570 feet long, 40 feet alongside; head of Slip A, 120 feet long, 40 feet alongside; deck heights, 11 feet; receipt and shipment of conventional general cargo in foreign and domestic trades.

Pier A, North Wharf and Slip B, End Wharf (30°42'24"N., 88°02'31"W.): S side of Slip B, 1,502 feet long, 40 feet alongside, deck height, 11 feet; head of Slip B, 457 feet long 40 feet alongside, deck height, 6 and 11 feet; storage warehouses; receipt and shipment of conventional general cargo in foreign and domestic trades, forest products, and mooring company-owned floating equipment; operated by Alabama State Docks Department and Mobile Bay Towing, a Hvide Marine Co.

Pier B and Slip C; End Wharf (30°42'27"N., (104) 88°02'23"W.): S side, 1,532 feet long; 40 feet alongside; deck height, 11 feet; receipt and shipment of conventional general cargo in foreign and domestic trades, and shipment of forest products.

Pier C (30°42'39"N., 88°02'26"W.): S side, 1,532 feet long, head of pier, 885 feet long; N side, 1,411 feet long; 40 feet alongside; deck alongside; deck height, 11 feet; receipt and shipment of conventional general cargo in foreign and domestic trades, steel, aluminum and forest products, and heavy-lift items.

Pier D, South Grain Elevator Wharf (30°42'50"N., 88°02'35"W.): Berths 3, 2, 1, and face, 1,405 feet of berthing space with dolphins; 28 feet alongside; deck height, 11 feet; mooring vessels.

Pier D, River End Grain Elevator Wharf (107) (30°42'54"N., 88°02'29"W.): 800-foot face; 38 feet alongside; deck height, 11 feet; 38,700 square feet covered storage; 13.1 acres of open storage; shipment of grain by vessel; occasional receipt of conventional general cargo in foreign and domestic trades.

Bulk Material-Handling Plant, Barge Wharf (108)(30°43'26"N., 88°02'37"W.): on S side of Threemile Creek; 550 feet of berthing space with dolphins; 40 feet alongside; deck height, 8 feet; shipment of dry bulk commodities, including coal, coke, bauxite, gravel, potash, manganese, and iron ore by barge.

EOTT Energy Corp., Mobile Terminal Ship Dock (30°43'40"N., 88°02'37"W.): 800 feet of berthing space with dolphins; 40 feet alongside; deck height, 12 feet; receipt and shipment of crude oil; owned and operated by EOTT Energy Corp.

BP Oil Co., Mobile Terminal Barge Wharf (30°43'56"N., 88°02'38"W.): 400 feet of berthing space with dolphins; 20 feet alongside; deck height, 8 feet; receipt and shipment of petroleum products by barge; owned and operated by BP Oil Co.

Facilities on Mobile River, E side: (111)

Gulf Coast Asphalt Co., Mobile Terminal Wharf (30°42'26"N., 88°02'11"W.): 116-foot offshore wharf; 900 feet of berthing space with dolphins; 42 feet alongside; deck height, 8 feet; pipelines extend from wharf to storage tanks, total capacity, 403,000 barrels; receipt and shipment of asphalt and petroleum products; owned and operated by Gulf Coast Asphalt Co., L.L.C.

Alabama Bulk Terminal Co., Blakeley Island Wharf (113) (30°41'45"N., 88°02'06"W.): 142-foot offshore wharf, 800 feet with dolphins; 40 feet alongside; deck height, 10 feet; pipelines extend from wharf to storage tanks, total capacity, 1.2-million barrels; receipt and shipment of petroleum products, petrochemicals, asphalt, and crude oil; owned and operated by Alabama Bulk Terminal Co.

Facilities on Chickasaw Creek:

B & F Terminal Co., Chickasaw Wharf (30°45'47"N., (115)88°03'02"W.): 934-foot face; 23 feet alongside; deck height, 9 feet; receipt and shipment of conventional and containerized general cargo in foreign and domestic trades; owned and operated by B & F Terminal Co., a division Buchanan Lumber Co.

Coastal Mobile Refining Co., Chicasaw Barge Wharf (30°45′50″N., 88°03′08″W.): 680-foot face; 20 feet alongside; deck height, 12 feet; receipt of crude oil; shipment of petroleum products; owned and operated by Coastal Mobile Refining Co., a subsidiary of Coastal Corp.

Caribe, Chickasaw Wharf (30°45'50"N., 88°03'15"W.): 456-foot face; 19 to 23 feet alongside; deck height, 12 feet; mooring company-owned vessels for repair and maintenance; owned and operated by Caribe, Inc.

Total Cargo Services, Chickasaw Wharf (30°45'53"N., 88°03'35"W.): 1,010-foot face; 240-foot lower side; 30 to 35 feet alongside; deck height, 7 feet; receipt and shipment of conventional and containerized general cargo in foreign and domestic trades; owned and operated by Total Cargo Services, Inc.

Coastal Mobile Refining Co., Chickasaw North Terminal Wharf (30°45'57"N., 88°03'35"W.): 350-foot face; 1,010-foot S side; 1,085-foot N side; 36 feet alongside; deck height, 4 and 10 feet; receipt of crude oil; shipment of petroleum products; mooring vessels; owned and operated by Coastal Mobile Refining Co., a subsidiary of Coastal Corp.

Supplies

Marine supplies of all kinds are available in Mobile. (120) Bunker fuel, diesel oil, and lubricants are available. Large vessels can be bunkered at the Texaco Terminal Pier, Alabama State Docks, Piers B, C, and D North Wharf, or at other berths by tank barges. Water, almost chemically pure, is available at most of the berths.

Repairs

There are three large shipyards in the Mobile area; all types of repairs can be made to deep-draft vessels. The largest floating drydock, at a shipyard on the W side of Pinto Island, has a capacity of 19,400 tons, an overall length of 732 feet, a minimum clear inside width of 105 feet, and a depth of 27 feet over the blocks. Smaller shipyards with marine railways and smaller floating drydocks are on Blakeley Island, on the W side of Mobile River at Mobile, at Chickasaw, and on Dog River.

Salvage tugs, seagoing and equipped for heavy (122) work, are available. Barges, derricks, pumps, and diving outfits are available for virtually any type of work.

Small-craft facilities

Berths and other facilities for small craft are limited at Mobile due to heavy commercial traffic. Facilities for small craft at Fort Morgan, East Fowl River, Fairhope, Fly Creek, and Dog River are discussed earlier in this chapter.

Communications

Mobile is served by four trunkline railroads, major (124) airlines, and highway connections. Regular steamer communications with most major ports in the world and all the important Gulf, Atlantic, Caribbean, and Pacific ports are made from Mobile. Inland boats and barges serve the river ports in the interior of the State and also connect with Gulf ports. Radio station WLO at Mobile handles general commercial radio and radiotelephone business between the hours of 0430 and 0030. The station is equipped to handle traffic on VHF-FM radiotelephone and cable traffic. Radio station WNU, New Orleans, handles traffic for station WLO between the hours of 0030 to 0430. The harbormaster's office is equipped with VHF-FM channel 16 and channel 65A on the intraport radiotelephone system which

connects all pilot boats, tugs, and all waterway traffic in the area.

Mobile River and Tensaw River are formed by the (125) confluence of Alabama River and Tombigbee River about 45 miles above Mobile. In 1972, the reported depth to the confluence was about 14 feet. The channel in Mobile River is marked by lights, buoys, and day-

Tensaw River is crossed at its mouth by two U.S. (126) Route 90 highway bridges, which have fixed spans with a minimum clearance of 26 feet. An overhead power cable with a clearance of 46 feet crosses the river just N of the bridges. Twin fixed highway bridges with a clearance of 24 feet cross the river about 0.3 mile N of the U.S. Route 90 bridges. The S end of Blakeley Island has been extended E by dredged fill to the W side of the entrance to Tensaw River. The battleship ALABAMA is permanently moored on the E side of the fill at a State park.

The Mobile-Tensaw Rivers Cutoff connects the two rivers about 8 miles above Mobile. The cutoff had a reported depth of about 13 feet in July 1972. From the cutoff the channel into Tensaw River is marked by buoys and an unlighted range on the E bank of the river; the controlling depth on the range is about 3 feet. For craft drawing more than 3 feet, it is necessary to turn S at the E end of the cutoff, pass around the S end of Gravine Island, and then proceed upriver in the E branch.

A railroad bridge over Mobile River, 8.3 miles above the city, has a swing span with a clearance of 4 feet. (See 117.1 through 117.49, chapter 2, for drawbridge regulations.)

A railroad bridge crossing Tensaw River about 13 miles above the mouth has a swing span with a clearance of 11 feet. (See 117.1 through 117.59 and 117.113, chapter 2, for drawbridge regulations.) Tensaw River is crossed by overhead power cables on both sides of Gravine Island. The cable crossing the W channel about 1.7 miles below the cutoff has a clearance of 74 feet, and the cable over the E channel about 1.2 miles below the cutoff has a clearance of 68 feet. Interstate Route 65 twin fixed highway bridges, with clearances of 42 feet, cross the Tensaw River about 19.6 miles above the mouth.

Light-draft boats can reach Tensaw River either by going up Mobile River to Spanish River and thence down that river, or from the main channel through the channel S of Pinto Island. An overhead power cable with a clearance of 68 feet crosses Spanish River about 0.1 mile below its confluence with Mobile River.

Blakeley River and Apalachee River are crossed at (131)their mouths by twin fixed highway bridges with clearances of 16 feet. About 0.7 mile above the bridges, the rivers are crossed by U.S. Route 90/State Route 31 fixed highway bridges, which have a minimum vertical clearance of 16 feet. Overhead power cables on the N side of the U.S. Route 90/State Route 31 bridges have minimum clearances of 37 feet. A fish camp about 0.4 mile S of Vessel Point has berths, water, ice, and a launching ramp.

D'Olive Bay, on the E side of Blakeley River, is entered through a channel marked by private daybeacons about 0.9 mile below the U.S. Route 90 bridges. In May 1982, the reported controlling depth was about 3 feet across Blakeley River Bar and through the lower river into the bay. A yacht club in the bay has gasoline, diesel fuel, and limited marine supplies.

Navigation is possible above Mobile to the inland Alabama ports of **Jackson**, mile 78, **Demopolis**, mile 214, Tuscaloosa, mile 340, Port Birmingham, mile 396.5, and various landings via dredged channels in the Black Warrior-Tombigbee River System. Mobile River joins the Tombigbee River about 45 miles above Mobile. Just above Demopolis, at the junction of the Black Warrior and Tombigbee Rivers at about mile 217, the waterway continues via the Black Warrior River and thence at about mile 385 divides into two navigable forks. The head of navigation on Mulberry Fork is at about 385, and on Locust Fork at mile 385. A Federal project provides for a 9-foot channel in the Black Warrior-Tombigbee River System. (See Local Notice to Mariners for latest controlling depths.)

Six lock and dam systems are on the waterway. The size of vessel that can navigate the waterway is controlled by the dimensions of the smallest lock, the William Bacon Oliver Lock and Dam at mile 337. This lock is 460 feet long and 95 feet wide, with a depth of 11 feet over the sill.

Several bridges and numerous overhead power ca-(135) bles cross the waterway. Bridges over the section of the waterway from the mouth of Tombigbee River to the junction with the upper forks are of the vertical-lift or fixed-span type; least clearance is 40 feet for the fixed spans, and 15 feet for the vertical-lift spans. (See 117.1 through 117.49, chapter 2, for drawbridge regulations.) Only bridges of the fixed type cross Mulberry and Locust Forks; least clearance is 31 feet over Mulberry Fork, and 38 feet over Locust Fork. Least clearance of overhead power cables crossing the waterway is 40 feet.

Waterborne commerce on the waterway between Mobile and Port Birmingham is in pulpwood, chemicals, petroleum products, shell, sand and gravel, limestone, ores, pig iron, coal, grain, and steel products.

Charts for the Black Warrior-Tombigbee Rivers (137)System are available from the U.S. Army Corps of Engineers Mobile office. (See appendix for address.)

From just above Demopolis, Ala., at the confluence (138) of the Tombigbee and Black Warrior Rivers, the Tennessee-Tombigbee Waterway (Tenn-Tom Waterway) extends N through the Tombigbee River and land cuts for about 203 miles connecting the Black Warrior-Tombigbee River System with the Tennessee River. The waterway provides a link between the deepwater port of Mobile and the inland waterways which were formerly accessible only via the Mississippi River system.

From Demopolis, the waterway extends up the (139) Tombigbee River for about 127 miles to just S of Amory, Miss. For the next 42 miles to Bay Springs, Miss., the waterway consists of a canal parallel to and separated from the river by a levee. The remaining 34 miles of the system traverse a cut through the divide between the Tennessee and Tombigbee River basins.

The Federal project provides for a 9-foot channel from Demopolis to Amory and thence a 12-foot channel to the Tennessee River. The waterway's 341-foot ascent is accomplished by 5 dams and 10 locks. The locks are 100 feet wide and 600 feet long and have a minimum depth over the sill of 15 feet.

The minimum clearance of the bridges crossing the Tennessee-Tombigbee Waterway is 52 feet at normal pool. Overhead cables have a minimum clearance as great or greater than the minimum bridge clearance.

Waterborne commerce on the waterway includes (142)coal, grain and other farm products, metallic and nonmetallic ores, chemicals and allied products, pulp, paper and other wood products, and petroleum.

Charts for the Tennessee-Tombigbee Waterway are available from the U.S. Army Corps of Engineers Mobile office. (See appendix for address.)

Mobile River joins Alabama River about 45 miles (144) above Mobile. A Federal project provides for a 9-foot channel in Alabama River from the mouth to Montgomery, Ala., about 290 miles above Mobile. In June 1981, the controlling depth was 9 feet to Claiborne, about 58 miles above the mouth; thence in 1972, 3½ feet to the head of the project. Greater depths can normally be carried from November to June. The channel is marked by buoys and daybeacons. Least clearance of bridges crossing the river is 17 feet for swing bridges, 42 feet in the up position for vertical lift bridges, and 36 feet (at Montgomery) for fixed bridges. The bridgetender of the Burlington Northern railroad bridge at Coy monitors VHF-FM channel 16 and works on channel 13: call sign WXY-960. (See 117.1 through 117.59 and 117.101, chapter 2, for drawbridge regulations.) Least known clearance of overhead power cables crossing the river is 50 feet. Least vertical clearance is 27 feet at the cable ferry guide cable about 112 miles above Mobile.

Cable ferry

A cable ferry crosses the river about 112 miles (145) above Mobile. The ferry carries vehicles and passengers and operates between 0700 and 1700 daily. The ferry guide cable is suspended 27 feet above the water. The ferry crossing is marked by signs on both sides of the river. DO NOT ATTEMPT TO PASS A MOVING CABLE FERRY.

(146) The lock and dam systems on the river are Claiborne Lock and Dam, mile 63.0, Millers Ferry Lock and Dam, mile 115.6, and Henry Lock and Dam, mile 205.2. Operating hours of the locks are as follows: Claiborne Lock, 24 hours; and Millers Ferry and Henry Locks, 0600 to 1400 and 1800 to 0200. The locks are each 600 feet long, 84 feet wide, and have 13 feet over the sills.

Waterborne commerce on the river consists of (147) pulpwood, petroleum products, sand, and gravel.

Navigational charts for the Alabama River are available from the Mobile Corps of Engineers Office. (See appendix for address.)

Charts 11360, 11373, 11374, 11372

Mississippi Sound extends 70 miles W of Mobile Bay between a chain of narrow, low, sand islands and the mainland, providing a sheltered route for the Intracoastal Waterway from Mobile to New Orleans. Natural depths of 12 to 18 feet are found throughout the sound, and a channel 12 feet deep has been dredged where necessary from Mobile Bay to New Orleans. (See chapter 12 for Intracoastal Waterway.) Mississippi Sound can be entered from Mobile Bay through Pass aux Herons; from the Gulf through Petit Bois, Horn Island, Dog Keys, and Ship Island Passes, and Cat Island Channel; from Lake Borgne through Grand Island Pass.

Ship, Horn, and Petit Bois Islands, barrier islands (150) separating Mississippi Sound from the Gulf of Mexico, are part of Gulf Islands National Seashore and subject to the rules and regulations of the U.S. Department of the Interior, National Park Service. Petit Bois Island National Wildlife Refuge and Horn Island National Wildlife Refuge are within the National Seashore.

COLREGS Demarcation Lines

The lines established for Mississippi Sound are de-(151) scribed in **80.815** chapter 2.

Pass aux Herons connects the SW corner of Mobile Bay with the E end of Mississippi Sound and is part of the Intracoastal Waterway. (See chapter 12 for Intracoastal Waterway.)

Grants Pass, 0.3 mile N of Pass aux Herons, connects Mobile Bay and Mississippi Sound. The channel is unmarked and is used only by small boats.

Dauphin Island is a fishing village and summer resort at the NE part of Dauphin Island. A dredged channel leads from Mississippi Sound through Bayou Aloe to an anchorage basin at Dauphin Island village. In October 2004, the controlling depth in the entrance channel was 5.2 feet (7.0 feet at midchannel), thence 4.2 to 7.0 feet in the basin. The channel is marked with lights and daybeacons. There are a marina and fish camps at the village; berths, gasoline, diesel fuel, water, and marine supplies are available.

Mariners are advised to use caution when ap-(155) proaching the dredged entrance channel from the W because of an obstruction protruding about 2 to 3 feet above water in about 30°15'54"N., 88°09'54"W.

Dauphin Island Bay is a shallow bay at the E end of Dauphin Island between Dauphin Island Bridge and Little Dauphin Island. The bay is accessible from Mississippi Sound through a privately marked and dredged channel and from Mobile Bay through an inlet protected by a jetty about 0.2 mile N of Pelican Point. A channel marked by lights and daybeacons leads from Mobile Bay to the inlet entrance, thence a dredged channel leads through the inlet to an anchorage basin at Fort Gaines, thence a connecting channel leads from the anchorage basin to Dauphin Island Bay. In October 2004, the controlling depth was 7 feet in the entrance channel to the basin, thence 2.5 to 6.1 feet in the basin; thence in March 2004, 5.2 feet in the connecting channel.

In 1995-2001, shoaling to less than 4 feet was reported near the N side of the channel between Daybeacon 16 and Light 17.

Fort Gaines has a small-boat basin where Coast Guard craft, a U.S. Customs boat, and pilot boat moor. On the S side of the anchorage basin, just inside the inlet, there are eight surfaced launching ramps, five piers, and a bulkhead docking area. A ferry operates from Fort Gaines to Fort Morgan.

A large marina on the W shore of the bay has a 7½-ton mobile hoist. Engine and electronic repairs are available, as well as open and covered storage. Berths, electricity, gasoline, diesel fuel, water, ice, and marine supplies are available. An offshore breakwater protects the marina from N. In July 1972, there was reported to be 8 to 9 feet at the berths and 5 feet in the privately maintained and marked channel that leads along the S and W shores of the bay from the connecting channel to the marina and N and W into Mississippi Sound. Dauphin Island Bridge across the mouth of Dauphin Island Bay has a fixed span with a clearance of 25 feet. An overhead power cable W of the bridge has a clearance of 44 feet.

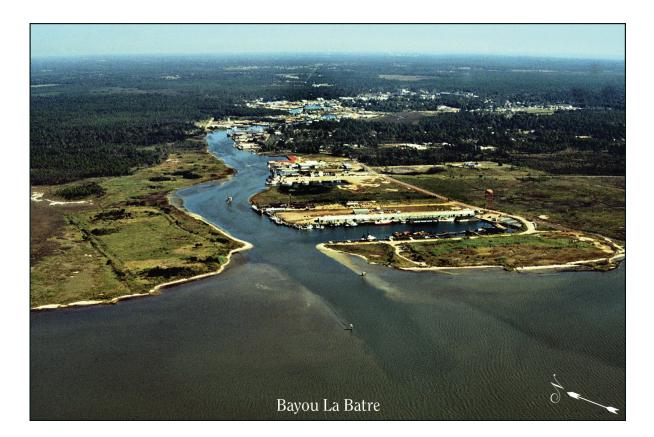
(160) **Heron Bay** is a shallow bay used mainly by skiffsize crabbing and oyster boats; local knowledge is advised.

Heron Bay Cutoff, locally known as The Cutoff, (161) about 1.8 miles N of Cedar Point, is a pass joining Heron Bay with Mobile Bay. Tidal currents of considerable velocity run through this pass which is used only by small boats. A fixed highway bridge over the pass has a clearance of 16 feet.

Charts 11376, 11374

West Fowl River enters Fowl River Bay about 4 miles NW of Cedar Point. It extends NE along the W side of Mon Louis Island, separating it from the mainland, and is joined to East Fowl River by a channel reported to be navigable by craft drawing about 2 feet or less. State Route 188 highway bridge, about 2 miles above the mouth, has a 30-foot fixed span with a clearance of 25 feet. An overhead power cable close SW of the bridge has a clearance of 33 feet. An overhead power cable with a reported clearance of about 30 feet crosses the channel connecting with East Fowl River at about 30°23'53"N., 88°08'39"W. The entrance to the river from Mississippi Sound is marked by private daybeacons from E of Cat Island to just below the highway bridge. A small marina on the E bank of the river about 0.5 mile below the highway bridge can provide berths with water and electricity, gasoline, diesel fuel, ice, a launching ramp, limited marine supplies, and engine repairs.

Coden is a small fishing village on **Bayou Coden** on the N shore of Portersville Bay, NE of Isle aux Herbes. A dredged channel leads from Bayou La Batre channel through Portersville Bay to the mouth of Bayou Coden, thence N to the State Route 188 highway bridge about 0.5 mile above the mouth of the bayou. A turning basin is on the W side of the channel about 500 feet below the bridge. In October 2004, the controlling depth in the channel was 4.4 feet (7.1 feet at midchannel) to the highway bridge, thence 4.2 feet in the basin. The channel is marked by lights and daybeacons. In 1999, State Route 188 highway bridge had a reported 35-foot fixed span with a clearance of 15 feet. There are seafood packing plants and several commercial shipyards that specialize in the construction of steel tugs and supply vessels.



Charts 11373, 11374

A dredged channel leads from deep water in Mississippi Sound through Bayou La Batre to a turning basin about 0.5 mile below State Route 188 highway bridge at the town of Bayou La Batre, thence to the bridge. In February 2003, the controlling depths were 13.0 feet in the entrance channel to the mouth of the bayou; thence in February 2005, 13.7 feet (15.6 feet at midchannel) to the turning basin, thence 18.0 feet in the turning basin, thence 11.1 feet (14.0 feet at midchannel) to the highway bridge. The channel is marked by buoys, lights, and daybeacons. State Route 188 highway bridge has a vertical lift span with clearances of 61/2 feet down and 73 feet up. (See 117.1 through 117.59 and 117.103, chapter 2, for drawbridge regulations.) An overhead power cable at the bridge has a clearance of 60 feet.

Shrimp, fishing, and party-boat fleets operate out (165) of Bayou La Batre. The town has several seafood packing plants and canneries. Several boatyards on the bayou build commercial steel and wooden vessels up to about 115 feet in length. Machine shop facilities are also available.

Small-Craft facilities

There are several small-craft facilities on Bayou La (166) Batre; most are along the E side. (See the small-craft facilities tabulation on chart 11374 for services and supplies available.)

Tides

The diurnal range of **tide** is 1.5 feet. (167)

The Alabama-Mississippi boundary is about 6.5 (168) miles W of Bayou La Batre.

Petit Bois Pass, an entrance from the Gulf between (169) Dauphin Island and **Petit Bois Island**, is used primarily by fishing vessels with local knowledge drawing about 6 feet or less. The pass is no longer maintained and subject to frequent changes; passage can generally be made by following the deep green water during calm weather and by avoiding the breakers during rough weather. A lighted buoy is at the N end of the pass. The chart and knowledge of local conditions are the best guides.

Charts 11375, 11374, 11373

Pascagoula Harbor, one of the important deepwater ports on the Gulf Coast, is on Mississippi Sound about 9 miles N of **Horn Island Pass.** By water, it is 72 miles W of Mobile and 51 miles E of Gulfport. The facilities in the port area include a cold storage facility, shipyards, and other industries at the mouth of Pascagoula River and an industrial area centered around Bayou Casotte, about 3 miles E of Pascagoula River.

Pascagoula, at the mouth of Pascagoula River, is a city with many large industries in shipbuilding and ship repair, manufacture of paper products, textiles, containers, seafood packing and processing, oil refining, fertilizer and chemicals. A hospital is in the city. Waterborne traffic in addition to those mentioned above is in petroleum products, crude oil, sand and gravel, liquid sulphur, ores, and logs.

Prominent features

The six refinery flares, E of Bayou Casotte, are very prominent from offshore at night. At the north end of Bayou Casotte, a 140-foot gypsum pile is prominent. The cranes of the shipyard and the twin tanks in Pascagoula are prominent from the sound. The range light towers on the W end of Petit Bois Island, the cracking towers and tanks at the oil refinery E of Bayou Casotte, and the towers, tanks, and elevators of the fertilizer plant on the E bank of Bayou Casotte are also prominent.

Horn Island Pass Lighted Whistle Buoy HI (30°08'30"N., 88°34'40"W.) marks the approach to Horn Island Pass.

Shipping Safety Fairways

Vessels should approach Horn Island Pass and Pascagoula Harbor through the prescribed Safety Fairways. (See 166.100 through 166.200, chapter 2.)

COLREGS Demarcation Lines

The lines established for Horn Island Pass are described in **80.815**, chapter 2.

Channels

The deepwater entrance is through dredged cuts in Horn Island Pass Channel, and in Mississippi Sound for about 4 miles N of Petit Bois Island where the channel divides, Pascagoula Channel leading about 4.5 miles NW to the mouth of Singing River (lower Pascagoula River), then N about 1.5 miles to a turning basin at the railroad bridge at Pascagoula, and Bayou **Casotte Channel** leading about 4 miles N to the turning basin at the head of Bayou Casotte. A Federal project provides for a depth of 40 feet in Horn Island Pass Channel and 42 feet in the sound and in Pascagoula and Bayou Casotte Channels to the 38-foot turning basins. (See Notice to Mariners and latest editions of charts for controlling depths.) The channel across the bar is marked by a 041° lighted range and lighted buoys, and the other channels are marked by lighted ranges, lighted and unlighted buoys, lights, and a daybeacon. Some of the inner ranges are often obscured by cranes and floodlights.

The Coast Guard advises vessels exercise particular caution where the channel intersects the Intracoastal Waterway, about 2.4 miles above the W end of Petit Bois Island, near Lighted Buoys 27 and 29. Situations resulting in collisions, groundings, and close quarters passings have been reported by both shallow and deep-draft vessels. The Coast Guard has requested vessels make a SECURITE call on VHF-FM channel 13 prior to crossing the Intracoastal Waterway, particularly during periods of restricted visibility.

Pascagoula River channel above Pascagoula and (178) Escatawpa River channel are discussed later in this chapter.

Anchorages

Deep-draft vessels may anchor 1 to 2 miles S or SE of the sea buoy, weather permitting. Anchorage for vessels up to 15-foot draft is available in Mississippi Sound E of the channel.

Explosives anchorages are N and S of the W end of (180) Petit Bois Island. (See 110.1 and 110.194b, chapter 2, for limits and regulations.)

Caution

Petit Bois Island and Horn Island are poor radar targets when approaching Pascagoula Harbor from seaward. Caution should be exercised when making landfall at night and during poor visibility.

Dangers

Shoal water up to 30 feet extends about 2 miles SW (182) of the W end of Petit Bois Island to about 0.25 mile SE of Horn Island Pass Channel Buoy 10 (30°11'45"N., 88°31'21"W.). Spoil banks are on the W side of Pascagoula Channel and on both sides of Bayou Casotte Channel. Vessels should not enter the channel before the pilot boards, especially light vessels during periods of strong winds and adverse weather.

In April 1992, a 30-foot shoal was reported 0.4 mile (183) SSE of the entrance to Horn Island Pass Channel in about 30°09'29"N., 88°33'09"W.

A restricted area is off the N side of Singing River (184) Island. (See 334.786, chapter 2, for limits and regulations.)

Tides and currents

The diurnal range of tide is 1.7 feet at Horn Island Pass and 1.6 feet at the mouth of the Pascagoula River. In Horn Island Pass the tidal current is reported to flood N and ebbs S averaging 1.2 knots at strength. In the dredged cut across the bar, the ebb and flood follow the direction of the cut. Winds greatly affect the velocity and direction of the currents, as well as the rise and fall of the tides. It is reported that strong E winds and seas create strong currents along the shore.

Weather

Pascagoula is in a low-lying area heavily wooded with pines and live oaks. Its climate is characterized by warm, humid summers and relatively mild winters. This is reflected by the temperatures which climb to 90°F or more on about 70 summer days, while falling below 32°F on only about 15 days each winter. Precipitation is frequent year round, but most likely from July through September. This is due, in part, to thunderstorms, which occur on about 9 to 16 days per month in June, July, and August. Strong winds, which can occur in thunderstorms or tropical cyclones, are most frequent from November through April when winter storms and cold fronts are prevalent. Gales are unlikely, but sustained winds of 17 to 33 knots occur 3 to 5 percent of the time. Poor visibilities are most likely during this same period and fall below 0.5 mile on 3 to 8 days per month. The tropical cyclone threat, which is rare in May and November, gradually increases through June, July, and August, reaching a peak in September and then falling off in October. During hurricane Camille in August 1969, the Northrup Grumman Ingalls (formerly Ingalls Shipbuilding Corporation) recorded a peak gust of 181 mph, While storm tides in the area rose to 11.2 feet above mean sea level. During Frederic in September 1979, Pascagoula was battered by gusts of 127 mph, 11 inches of rain, and 6-foot storm tides.

Pilotage, Pascagoula

Pilotage is compulsory for all foreign vessels and all U.S. vessels over 250 tons under register in foreign trade. Pilotage is optional for U.S. coastwise vessels that have on board a pilot licensed by the Federal Government. Pilotage is available from Pascagoula Bar Pilots' Association, 3309 Frederick Street, Suite 3, Pascagoula, MS 39567, telephone 228-762-1151, FAX 228-762-0660. Pilots board vessels about 1 mile S to SE of Horn Island Pass Lighted Whistle Buoy HI, day or night. Shoaling in certain areas of the channel restricts movement of larger vessels to daylight hours only, and the narrowness of the channels limits ocean traffic to one way at all times.

The pilot boats, 37 feet long with a forward house, and 35 feet long with an aft house, each have a black hull with a white house and the word PILOT on the forward part of the house. The pilot boats and pilot station monitor VHF-FM channels 13 and 16 and work on channel 13. Vessels to be boarded should contact the pilot boat for vessel speed and boarding side and rig the pilot ladder about 3 feet above the water. Pilots can be arranged for by telephone (228-762-1151) through the Mobile Marine Operator or through ships' agents. A minimum of 2 hours advance notice is requested.

Towage

Tugs up to 5,600 hp are available at Pascagoula. Arrangements should be made in advance through ships' agents.

Quarantine, customs, immigration, and agricultural quarantine

(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

Quarantine laws are enforced in accordance with (191) regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(192) The Singing River Hospital, which is operated by Jackson County, is at Pascagoula.

Pascagoula is a customs port of entry.

Coast Guard

(194) Pascagoula Coast Guard Station is on the N side of Singing River at the entrance to the Pascagoula River.

Harbor regulations

The Port of Pascagoula is under the control of the Jackson County Port Authority, which is responsible jointly with the Jackson County Board of Supervisors for the industrial development of the port. The Jackson County Port Authority through its Port Director is responsible for port and harbor improvement, harbor management, and regulation enforcement. The office of the Harbormaster assigns berths; telephone (228-762-4041).

Speed limit

No oceangoing vessel shall proceed in excess of 5 m.p.h. in Pascagoula River or Bayou Casotte.

Bridges

No bridges cross the channel from the Gulf to the municipal wharf. The CSX railroad bridge crossing the Pascagoula River about 1.5 miles above the mouth has a bascule span with a clearance of 8 feet. The bridgetender monitors VHF-FM channel 13; call sign KQ-7197. In January 2002, a submerged obstruction was reported SW of the bridge in about 30°22'07"N., 88°33'50"W.; extreme caution is urged. U.S. Route 90 highway bridge 0.2 mile above the railroad bridge has a fixed span with a clearance of 80 feet.

Overhead power cables 1.5 miles and 2.6 miles above the mouth of the river have clearances of 68 feet and 80 feet, respectively.

Wharves

The **Port of Pascagoula** which includes the lower 5.9 miles of the Pascagoula River, the lower 5.2 miles of the Escatawpa (Dog) River, and Bayou Casotte, has

more than 60 piers, wharves, and docks. The principal facilities are on both sides of the Pascagoula River and at the Bayou Casotte. General cargo piers operated by the Jackson County Port Authority are on the W side of the Pascagoula River and on the E side of Bayou Casotte. The other major deep-draft facilities are privately operated by petroleum, chemical, and shipbuilding and repair companies. Only the deep-draft facilities are described. For a complete description of the port facilities refer to Port Series No. 19, published and sold by the U.S. Army Corps of Engineers. (See appendix for address.) The alongside depths of the facilities described are reported; for information on the latest depths contact the Jackson County Port Authority or the private operators. All the piers described have direct highway connections, and most have railroad connections. Water and electrical shore power connections are available at most of the piers and wharves described.

General cargo at the port is usually handled by ship's tackle; special handling equipment, if available, is mentioned in the description of the particular facility. Floating cranes to 50 tons and mobile cranes to 150 tons are normally available. Cranes to 400 tons may be obtained by special arrangement.

Facilities on Pascagoula River, W side:

Jackson County Port Authority, Terminal A Wharf (202) (30°21'40"N., 88°33'58"W.): 500-foot face; 38 feet alongside; deck height, 10 feet; 80,000 square feet covered storage area including a cold storage warehouse; railway connections; stevedoring equipment available; receipt and shipment of conventional general cargo in foreign and domestic trade, including lumber, wood pulp, line board, and frozen foods; owned and operated by the Jackson County Port Authority.

Jackson County Port Authority, Terminal B Wharf (30°21'46"N., 88°33'58"W.): 544-foot face; 38 feet alongside; deck height, 10½ feet; 145,000 square feet covered storage; stevedoring equipment available; receipt and shipment of conventional general cargo in foreign and domestic trade, including lumber, wood pulp, and lineboard; owned and operated by the Jackson County Port Authority.

Jackson County Port Authority Terminal C Wharf (30°21'52"N., 88°34'00"W.): 718-foot face; deck height, 13 feet; 38 feet alongside; cold storage; shipment of frozen food in foreign trade.

Jackson County Port Authority Terminal D Wharf (30°21'54"N., 88°34'03"W.): 732-foot face; deck height, 13 feet; 38 feet alongside; 159,000 square feet covered storage; receipt and shipment of conventional and roll-on/roll-off general cargo in foreign and domestic trade; shipyard repair facilities to 13 acres.

National Marine Fisheries Service, Pascagoula Wharf (30°21'59"N., 88°33'46"W.): 535-foot face; 20 feet alongside; deck height, 9 feet; mooring oceanographic research vessels; owned by the U.S. Government and operated by the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service.

Facilities on Bayou Casotte:

Chevron Texaco Refinery, Pascagoula Refinery, Berth No. 6 (30°20'05"N., 88°30'37"W.): 125-foot face; 260 feet of berthing space with dolphins; deck height, 15 feet; 42 feet alongside; pipelines extend from wharf to storage tanks with total capacity of 13½ million barrels; six hydraulic loading arms; unloading crude oil and naphtha; owned and operated by Chevron Texaco Refinery.

Chevron Texaco Refinery, Pascagoula Refinery, (210) Berth No. 7 (30°19'56"N., 88°30'48"W.): 80-foot face; 765 feet of berthing space with dolphins; deck height, 15 feet; 42 feet alongside; pipelines extend from wharf to storage tanks with total capacity of 4½ million barrels; four hydraulic loading arms; unloading crude oil and coker feed; owned and operated by Chevron Texaco

(211) Chevron Texaco Refinery, Pascagoula Refinery Wharf No. 1, Berths 1-5 (30°20'27"N., 88°30'30"W.): Berth 1, two-parallel platforms with steel walkway to Wharf No. 1; 220 feet of berthing space with dolphins; 10 to 14 feet alongside space with dolphins; 38 feet alongside; Berths 2 and 3, 523 feet of berthing space with dolphins, Berths 4 and 5, 690 feet of berthing space with dolphins; deck height, 12 feet; pipelines extend to storage tanks; railway connections; loading and unloading of liquified petroleum gas, methanol, clean oil, chemicals, and asphalt; owned and operated by Chevron Texaco Refinery.

Jackson County Port Authority, Terminals G and H (212) Wharves (30°20'42"N., 88°30'27"W.): W face, 556 feet long; N face, 516 feet long; 38 feet alongside; deck height, 12 feet; transit shed with 174,870 square feet of covered storage; receipt and shipment of conventional general cargo and miscellaneous dry bulk materials in foreign and domestic trade; owned and operated by the Jackson County Port Authority.

Jackson County Port Authority, Terminals E and F Wharves (30°20'48"N., 88°30'22"W.): S face, 737 feet long; W face, 517 feet long; 38 feet alongside; deck height, 12 feet; transit shed with 174,870 square feet of covered storage; 25 acres of open storage; receipt and shipment of conventional general cargo and miscellaneous dry bulk materials in foreign and domestic trade; receipt and shipment of liquid chemicals; shipment of forest and paper products; owned by the Jackson

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County Port Authority and operated by the Jackson County Port Authority and First Chemical Corp.

Mississippi Phosphates Corp., Pascagoula Plant South Wharf (30°20'55"N., 88°30'21"W.): 83-foot offshore wharf; 800 feet of berthing space with dolphins; 42 feet alongside; deck height, 9 feet; one hand-operated, hose-handling derrick; pipelines extending to storage tanks with total capacity of 7.1-million gallons; receipt of sulfuric acid, liquid sulphur, and liquid fertilizer; shipment of bulk fertilizer; owned and operated by Mississippi Phosphates Corp.

Mississippi Phosphates Corp., Pascagoula Plant North Wharf (30°21'02"N., 88°30'17"W.): 76-foot offshore wharf; 800 feet of berthing space with dolphins; 42 feet alongside; deck height, 9 feet; conveyor and a double marine-leg discharge system with a 1,000-ton-per-hour unloading rate; pipelines to storage tanks; open storage area with 100,000-ton capacity; receipt and shipment of sulfuric acid; liquid sulphur, and liquid ammonia; receipt of phosphate rock; owned and operated by Mississippi Phosphates Corp.

Supplies

Marine supplies of all kinds are available in Pascagoula. Bunker fuel, diesel oil, and lubricants are available. Large vessels are bunkered at their berths by barge. Water is available at most of the berths.

Repairs

The Northrup Grumman Ingalls is engaged primarily in new construction and major overhauls. Their facilities are on the E and W sides of Pascagoula River just above the mouth, and include shipbuilding and launching ways, outfitting piers, and electrical, electronic, sheet metal, pipe, and machine shops. The shipyard's floating drydock on the W side of the river can handle vessels up to 820 feet long and 170 feet wide, has a depth of 41 feet over the keel blocks, and has a lifting capacity of 38,000 tons. On the E side of the river, the shipyard has a graving dock 485 feet long, 85 feet wide on the keel blocks, with a depth of 35.8 feet over the keel blocks. Cranes up to 60-ton capacities are at the outfitting piers, and floating cranes up to 50-ton capacities are available.

Several smaller shipbuilding and repair yards are in Pascagoula where numerous tugs, barges, and offshore supply vessels are built. Signal International operates two yards, and VT Halter Marine operates three yards in the Pascagoula/Jackson County area providing service to semi-submersible and jack-up oil rigs as well as a vastly assortment of ships and boats. One is adjacent to the Port Authority Terminal D on the Pascagoula River, two are above the highway 90 bridge in the Escatawpa and Moss Point areas. The two largest are on the west side of Bayou Casotte with large floating cranes and gantry crane service available. There are other independently operated repair yards. The largest of these is on the S side of Krebs Lake. A floating drydock at the yard can handle vessels to 190 feet long and 45 feet wide, has a depth of 12 feet over the keel blocks, and has a lifting capacity of 800 tons. A 100-ton marine railway that can handle most vessels to about 100 feet long and a 60-ton mobile hoist are at the yard. Other yards have marine lifts and marine ways with facilities for handling vessels and barges. Machine shops are available. Several of the smaller yards build wooden and steel vessels up to 140 feet and barges up to 250 feet.

Communications

The port is served by freight service of the CSX Railroad and freight service by the Mississippi Export Railroad which connects with the Canadian National Railroad at Evanston about 35 miles N of the city. Trent Lott International Airport, which provides charter or private aircraft service but no scheduled airline services, is about 2 miles NE of the city. Major bus lines and several motor freight lines serve the city.

Small-craft facilities

There is a municipal boat basin with berths for (220) small craft up to 40 feet at the head of Lake Yazoo, which is entered through a channel on the E side of the river entrance. In 1983, a reported depth of 5½ feet could be carried to the basin. There are no services. Daybeacons mark the entrance. There are several marinas, service wharves, and boatyards along the Pascagoula River, above and below the bridges at Pascagoula. Berths, electricity, gasoline, diesel fuel, water, ice, marine supplies, and launching ramps are available. Hull, engine and electronic repairs can be made, and dry storage is available.

A dredged channel in Pascagoula (Singing) River leads from the deep-draft turning basin just below the CSX railroad bridge at Pascagoula to a junction with **Escatawpa (Dog) River,** thence to the State Route 613 highway bridge crossing the river 0.7 mile above the mouth, thence to a commercial, industrial park about 3.5 miles above the State Route 613 bridge. In October 2004, the controlling depth was 5.1 feet (9.4 feet at midchannel) to the State Route 613 bridge, thence 4.8 feet (8.7 feet at midchannel) to the head of the project with shoaling to 1.2 feet at the head of the project. The channel is marked by lights and daybeacons.

Pascagoula River is navigable to the confluence of Leaf River and Chickasawhay River about 64 miles above its junction with Escatawpa River. In June 1982,

the reported controlling depth was 12 feet to Caswell **Lake** about 18 miles above the junction with Escatawpa River, thence 2 feet to the confluence of the Leaf and Chickasawhay Rivers.

A privately dredged channel leads from the dredged channel in Pascagoula River about 0.3 mile N of U.S. Route 90 highway bridge to a shipyard pier at the SW corner of Krebs Lake. The channel is marked by buoys and a daybeacon. In January 2001, the controlling depth in the channel was 8.9 feet (10.2 feet at midchannel).

Moss Point is a city on the Escatawpa River about 2 miles above the junction with the Pascagoula River. There are industries in chemicals, rubber, paper products, shipbuilding, fertilizer, seafood processing, and lumber. State Route 613 highway bridge crossing the river about 0.7 mile above the mouth has a fixed span with a clearance of 77 feet. Above the bridge are shipyards that build vessels up to 185 feet, and several menhaden processing plants. State Route 63 fixed highway bridge with a clearance of 73 feet crosses the river about 2.4 miles above the mouth. About 2.6 miles above the mouth, the Mississippi Export railroad bridge has a swing span with a clearance of 5 feet. (See 117.1) through 117.49, chapter 2, for drawbridge regulations.) Overhead power cables crossing at the bridge have clearances of 80 feet.

About 0.5 mile N of the highway bridge at Pascagoula, a privately dredged canal, with a reported controlling depth of about 6 feet in June 1982, leads from Pascagoula River through Marsh Lake to West Pascagoula River. The canal is unmarked.

About 2.5 miles N of the U.S. Route 90 highway bridge at Pascagoula, a cutoff leads from Pascagoula River through Bayou Chemise and West Pascagoula **River** to Mississippi Sound. It is marked by a daybeacon at its E entrance and a daybeacon in Bayou Chemise. The controlling depth is about 7 feet. An overhead power cable crossing Bayou Chemise has a clearance of 80 feet. West Pascagoula River is crossed about 0.8 mile above the mouth by a Chesapeake Seaboard X Transportation, Inc. (CSX) bridge with a fixed span with a clearance of 7 feet, and about 1 mile from the mouth by U.S. Route 90 highway bridge with a fixed span with a clearance of 13 feet. Overhead power cables just above and 1.1 miles above the highway bridge have clearances of 33 and 80 feet, respectively.

In February 1986, unmarked pilings extending 2 feet above water were reported to be at the mouth of West Pascagoula River, in about 30°21'18"N., 88°36'06"W.

Mary Walker Bayou enters West Pascagoula River about 0.2 mile N of the highway bridge. Several marinas are along the S side of the bayou and on the W side of West Pascagoula River. (See the small-craft facilities tabulation on chart 11374 for services and supplies available.)

Charts 11372, 11373

Dog Keys Pass forms a connection between Mississippi Sound and the Gulf at the W end of Horn Island. The pass has a depth of about 13 feet over the bar and is used primarily by local fishing craft. Most vessels entering from the Gulf use Ship or Horn Island Pass in preference to Dog Keys Pass. The entrance is marked by **Dog Keys Lighted Buoy 2** off the W end of Horn Island. Dog Keys Pass Lighted Gong Buoy 1, about 1.9 miles SSW of the W end of Horn Island, marks the channel across the bar.

In November 1987, a visible wreck was reported about 0.5 mile SW of the W end of Horn Island in about 30°14'12"N., 88°46'42"W.

COLREGS Demarcation Lines

The lines established for Dog Keys Pass are de-(231) scribed in 80.815, chapter 2.

Isle of Caprice formerly existed midway between Horn Island and Ship Island. The island was destroyed by a hurricane about 1917, leaving only a 4-inch diameter pipe from an artesian well. In July 1972, this pipe was reported still intact and discharging freshwater. The well is protected by 3-inch diameter pipes with private markers. Only a shoal remains of the former island.

Little Dog Keys Pass, about 2.5 miles W of Dog (233) Keys Pass, is used by sport fishermen and some fishing craft. In July 1972, depths of 14 feet or more were reported available in the pass, and it was often used in preference to Dog Keys Pass. In 1967, an unmarked wreck covered 12 feet was reported in Little Dog Keys Pass in about 30°14'10"N., 88°49'51"W.

Charts 11372, 11373

(234) **Biloxi** is a city on a peninsula jutting E into Mississippi Sound about 40 miles W of Mobile Bay and 11 miles E of Gulfport. It is an important sport fishing center and resort with a large commercial seafood industry. Hundreds of shrimp and oyster boats operate from the port in the season. Numerous hotels and casinos are along the E part of the waterfront on the sound and in Back Bay of Biloxi. Keesler Air Force Base and a large veterans hospital are at the W end of the city. The waterfront on the sound is protected by Deer Island, and the harbor in Back Bay of Biloxi is landlocked. The port is accessible from the Gulf through Dog Keys Pass and Little Dog Keys Pass and from the Intracoastal Waterway which passes through Mississippi Sound about 6 miles S of the city. (See chapter 12 for Intracoastal Waterway.) Principal shipments through the port are seafood, coal, building materials, wood products, petroleum products, iron and steel, and machinery.

Prominent features

The tank and radio tower at Ocean Springs, five tanks at Keesler Field, the Biloxi Lighthouse, and several large hotels in and W of Biloxi are prominent from offshore. At night the aviation light at Keesler Field is conspicuous. **Biloxi Light** (30°23'42"N., 88°54'06"W.), 61 feet above the water, is shown from a 53-foot white conical tower with black balustrade on the shore in the SW part of Biloxi proper.

Shipping Safety Fairways

Vessels bound for Biloxi via Dog Keys Pass should approach the pass through the Biloxi Safety Fairway. (See 166.100 through 166.200, chapter 2.)

Two channels connect Mississippi Sound and the Biloxi waterfront and Biloxi Bay. Biloxi East Channel, a dredged channel, leads from a point in Mississippi Sound 2.5 miles N of Dog Keys Pass, through Biloxi Bay E of Deer Island, to U.S. Route 90 highway bridge. In October 2004, the controlling depth was 8.0 feet (9.2 feet at midchannel). The channel is marked by lights and daybeacons. Biloxi Channel, a dredged channel, leads N from Mississippi Sound W of Deer Island, thence E along the S Biloxi waterfront to a junction with Biloxi East Channel at a point about 1 mile SE of U.S. Route 90 highway bridge. In October 2004, the controlling depth was 6.2 feet (7.0 feet at midchannel) to Light 18, thence 10.6 feet (11.3 feet at midchannel) to the junction with the Biloxi East Channel. The channel is marked by lights and daybeacons.

A privately dredged side channel leads NE from Biloxi East Channel, about 1 mile SE of U.S. Route 90 highway bridge, to a small-craft basin at **Ocean Springs**. In November 1984, the controlling depth in the entrance channel was 7 feet. The channel is marked by a light.

The channel into Back Bay of Biloxi, a continuation of Biloxi East Channel above U.S. Route 90 highway bridge, and Industrial Seaway are discussed later in this chapter.

Anchorages

Small craft can anchor off the waterfront north of Deer Island, or in Back Bay of Biloxi where there is excellent anchorage in depths of 5 to 15 feet, soft bottom, and good protection from all directions. A general anchorage for unmanned barges and scows is in

Mississippi Sound S of Biloxi. (See 110.1 and **110.194a**, chapter 2, for limits and regulations.)

Between Plummer Point and Biloxi the bay is (241) crossed by the U.S. Route 90 highway bridge with a bascule span having a clearance of 40 feet at the center. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KUF-720. (See 117.1 through 117.59 and 117.675, chapter 2, for drawbridge regulations.)

Dangers

A visible wreck was reported about 1.5 miles SE of (242) Biloxi Channel Light 2, in 30°20.2'N., 88°53.6'W.

Tides

The diurnal range of tide at Biloxi is about 1.8 feet. (243)

Weather

Biloxi winters are mild and moist, while summers (244) are hot and humid. The Gulf of Mexico is the primary moisture source and moderating influence. Severe weather is usually in the form of tropical cyclones or thunderstorms with damaging winds. Large hail and tornado outbreaks are usually confined to the interior, although there are occasional reports of waterspouts and tornadoes throughout the year. During winter, freezing precipitation and temperatures are much more frequent inland than at Biloxi.

During winter, there are usually three types of weather problems that affect navigation in this area. Low pressure systems sometimes develop off Texas and move NE across the area. These systems can bring drizzle, fog, and thunderstorms. Polar outbreaks usually bring cool, dry weather. The most impressive cold front is one that accompanies continental polar air. It is rare, except in a decayed state, but if active can bring extremely cold temperatures and snow. Usually there is little weather associated with it except for gusty winds. Most of the cold fronts are of the maritime variety which push in from W accompanied by widespread precipitation and often squall lines with thunderstorms. Advection fog creates a third winter weather problem in the Biloxi area. It is caused by the coastal waters being cooled by cold river discharges. When warm air flows across these waters a fog blanket forms. visibilities may improve somewhat by midday, with fog returning before evening. A less common problem is the formation of a fog bank if a S flow persists. These banks can fluctuate between the shore and offshore for a period of several days.

From late spring through early fall, the Bermuda High brings warm, moist air to this coast. This air mass is responsible for the thunderstorms that develop almost daily. They usually form inland during the day

and, if conditions are right, move toward the coast during the afternoon or early evening, sometimes bringing winds gusting to 30 knots or more. If the air mass is unstable, nocturnal thunderstorms may develop offshore after midnight and intensify to a peak just before sunrise. The most severe thunderstorms to affect Biloxi are those that move SW from inland areas NE of the city. They often form late in the afternoon and bring strong winds.

Tropical cyclones are a threat from June into No-(247) vember. Usually one passes within 500 miles of Biloxi each year, on average, but a direct hit is likely once every 10 years, on average. In September 1979, hurricane Frederic generated sustained winds of 61 mph and gusts to 98 mph at Biloxi. During Camille in August 1969, storm tides between Biloxi and Gulfport reached 20 feet in some spots.

Pilotage, Biloxi

See Pilotage, Gulfport, indexed as such, later this chapter..

Towage

The nearest tugs are based at Gulfport.

Quarantine, customs, immigration, and agricultural quarantine

(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

Quarantine laws are enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

The city has three hospitals and numerous clinics.

Harbor regulations

The harbor is controlled by the Biloxi Port Commission, headed by a Port Director, who establishes regulations. A harbormaster enforces the regulations and assigns berths at the small-craft harbor.

Wharves

The S waterfront has many docks. Some of these are private facilities for fishing companies, but several are open to the public. The Biloxi small-craft harbor is a basin protected by breakwaters and located N of the W end of Deer Island. Private lights mark the entrance to the harbor. In June 1982, the reported controlling depth in the basin and the channel leading to it was 8 feet.

Supplies

Gasoline, diesel fuel, water, ice, provisions, and marine supplies are available at Biloxi.

Repairs

Several shipyards are located on the waterfront and in Back Bay of Biloxi. A yard on Back Bay of Biloxi, about 0.4 mile E of Rhodes Point, has a 60-ton mobile hoist. Boats up to 140 feet are built at Biloxi.

Small-craft facilities

Berths, electricity, gasoline, diesel fuel, water, ice, launching ramps, and marine supplies are available, and hull, engine and electronic repairs can be made at small-craft facilities at Biloxi proper, Ocean Springs, and Back Bay of Biloxi.

Communications

The Chesapeake Seaboard X Transportation, Inc., (CSX) serves the city with freight service. U.S. Route 90 passes through the city, and State Route 15 leads N to the central part of the State. Interstate Route 110 serves Biloxi by joining U.S. Route 90 to Interstate Route 10. Scheduled airline service is available at Gulfport Municipal Airport, about 8 miles W of the city. Bus lines and several motor freight lines serve the city.

A channel with dredged sections leads from a junc-(259) tion with Biloxi East Channel at the U.S. Route 90 highway bridge through Back Bay of Biloxi and Big Lake to the entrance to Industrial Seaway. In January 2004, the controlling depth was 9.3 feet (11.1 feet at midchannel) from State Route 90 highway bridge to State Route 110 highway bridge, thence 11.4 feet (12.0 feet at midchannel) to Popps Ferry Road highway bridge; thence in February 2005, 5.7 feet (9.2 feet at midchannel) to the seaway. The channel is marked by lights and daybeacons.

A dredged channel, marked by private daybeacons, leads N from Biloxi East Channel, about 0.5 mile above the U.S. Route 90 highway bridge, to the entrance of Old Fort Bayou N of Fort Point. In April 1979, the reported controlling depth was 7 feet. The natural channel in the bayou is marked by private daybeacons for about 1.2 miles above Fort Point. The bascule highway bridge about 1.6 miles above Fort Point has a clearance of 20 feet. (See 117.1 through 117.59 and 117.681, chapter 2, for drawbridge regulations.)

The swing span of a former highway bridge just above U.S. Route 90 highway bridge has been removed, but the approach structures remain and are used for public recreation.

A dredged branch channel leads SW from the chan-(262) nel about 0.2 mile above U.S. Route 90 highway bridge to a turning basin in Ott Bayou. In January 2004, the controlling depth was 5.5 feet. Daybeacons mark the channel.

Chesapeake Seaboard X Transportation, Inc., (CSX) (263)bridge about 0.3 mile above U.S. Route 90 highway bridge has a swing span with a clearance of 14 feet. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197. (See 117.1 through 117.49, chapter 2, for drawbridge regulations.) The overhead power cable at the bridge is submerged at the drawspan. In June 1987, it was reported that the cable was missing. The channel runs through the W side of the swing. The E side is not dredged and is obstructed by piles awash at low water.

The East Harrison County Canal Channel, an unmarked dredged channel 0.8 mile above the U.S. Route 90 highway bridge, leads S from the channel to a turning basin. In July 2001, the controlling depth was 2.8 feet (6.7 feet at midchannel.)

Fishing piers, the remains of a former highway swing bridge, extend close to the channel edges from the N and S sides of the Back Bay of Biloxi near **Ship**yard Point. Interstate Route 110 highway bascule bridge, with a clearance of 60 feet at the center, crosses the bay about 0.2 mile W of the fishing piers. (See 117.1 through 117.59 and 117.675, chapter 2, for drawbridge regulations.) An overhead power cable with a clearance of 97 feet crosses immediately W of the fishing piers, and another overhead power cable with a clearance of 84 feet at the main channel and 40 feet elsewhere crosses about 2.5 miles W of the bascule bridge.

Pops Ferry Road bascule highway bridge with a (266) clearance of 25 feet crosses the bay at **Deep Point**. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign WXZ-590. (See 117.1 through **117.49** and **117.675**, chapter 2, for drawbridge regulations.)

Biloxi River empties into the NE side of Big Lake (267) and is reported navigable for a draft of 6 feet for 6 miles and for a draft of 3 feet for an additional 5 miles. The twin fixed spans of Interstate Route 10 highway bridge, about 3.5 miles above the mouth, have clearances of 40 feet. U.S. Route 49 fixed highway bridge, about 4.3 miles above the mouth, has a clearance of 9 feet; a fixed county highway bridge, about 7.8 miles above the mouth, has a clearance of 4 feet. A powerplant is on the river.

Tchoutacabouffa River empties into Biloxi River about 1 mile N of Big Lake from the NE. The river is reported navigable for drafts up to 5 feet to New Bridge, about 7.2 miles above the mouth, and for drafts of 3 feet for an additional 6 miles. The twin fixed spans of Interstate Route 10 highway bridge, with clearances of 42 feet, cross the river about 3.5 miles above the mouth. Cedar Lake Bridge, about 4.5 miles above the mouth, has a swing span with a clearance of 5 feet. The center pier of the former swing bridge is close downstream. (See 117.1 through 117.59 and 117.685, chapter 2, for drawbridge regulations.) New Bridge has a fixed span with a clearance of 38 feet. Lamey Bridge, about 3 miles above New Bridge, has a swing span which is reported inoperative; the channel is on the N side of the pivot pier; the clearance is 3 feet.

Bernard Bayou empties into Big Lake from the W. A dredged channel leads from the entrance at Shallow Point in Big Lake to a junction with Industrial Seaway at Gulfport Lake, NNE of Gulfport Municipal Airport. Overhead power cables cross the bayou about 0.5 mile above the mouth and have a clearance of 80 feet. In February 2004, the midchannel controlling depth was 0.9 foot to the overhead power cables, thence 1.1 highway bridge. The highway bridge at Hansboro has a fixed span with a clearance of 28 feet. In April 2001, the controlling depth from the highway bridge to Industrial Seaway was 2.0 feet (3.2 feet at midchannel).

Small-craft facilities about 1.5 and 1.8 miles above the mouth of the bayou can provide berths with electricity, gasoline, water, ice, a launching ramp, open and dry storage, pump-out station, marine supplies and complete engine and hull repairs. A 110-foot marine railway and a 70-ton fixed lift are also available.

Industrial Seaway, a canal privately dredged by the (271) Harrison County Development Commission, affords access to industrial areas along the seaway and Bernard Bayou N of Gulfport. The canal leads from a junction with the dredged channel section at the W end of Big Lake through a landcut from Shallow Point on the N side of the entrance to Bernard Bayou for about 2.5 miles, thence through Bernard Bayou and Gulfport Lake for about another 2 miles to a turning basin in the vicinity of Three Rivers Road. In January 2004, the controlling depth was 9.9 feet (11.4 feet at midchannel) to Light 5, thence 2.6 feet (12.0 feet at midchannel) to Light 11, thence 10.2 feet (11.0 feet at midchannel) to the end of the project. The channel is marked by lights. Plans provide for the extension of the seaway farther W to Wolf River and Bay St. Louis at a later date. Pilots for the seaway are available at Gulfport.

About 1.1 miles W of Shallow Point, overhead power cables crossing the seaway have a minimum clearance of 81 feet. An overhead power cable about 4.5 miles W of Shallow Point has a clearance of 80 feet.

Beauvoir, part of the city of Biloxi about 6 miles W (273) of Biloxi Bay, has a large domed convention center and a tank which are prominent. A privately dredged channel leads N from Mississippi Sound to a yacht basin in front of the hotel. In June 1982, the reported controlling depth was 10 feet in the channel and the basin. The channel is marked by private lights. A private white light is displayed from a white lighthouse at the basin.



Gasoline, diesel fuel, water, ice, marine supplies, and open and covered berths are available at the basin. There is a hoist that can handle craft up to 2½ tons for minor hull, engine, and electronic repairs. Radiotelephone watch on VHF-FM channel 16 is maintained from 0700 to 1700 at the basin. There is a **harbormaster**, and a **dockmaster** assigns the berths.

A wreck, marked by green and red cannisters, is (274) about 1.5 miles offshore in about 30°22.1'N., 88°55.1'W. Two privately marked oyster reefs are centered 0.4 and 1.7 miles NW of the wreck. Mariners are advised to exercise caution while transiting between Biloxi Channel and Beauvoir. In June 1986, a visible wreck was about 300 yards south of the dredged entrance channel in about 30°21'48"N., 88°57'54"W.

Charts 11373, 11372

Ship Island Pass lies immediately W of Ship Island, about 50 miles W of Mobile Bay entrance and 11 miles N of the northernmost of the Chandeleur Islands. The pass is approached from the Gulf through a dredged channel about 6 miles long, and is marked by lighted buoys.

Gulfport, the seat of Harrison County, is a seaport (276) and tourist center. It is about midway between Mobile and New Orleans by rail, and on U.S. Route 49 and 90 highways. Fishing, steel products, construction of barges and heavy cranes, chemicals, canning, glass making, and aluminum are some of the city's important industries. Waterborne commerce includes frozen meats and poultry, bananas, shell, sisal and jute, fertilizers, chemicals, seafood, flour, woodpulp and products, lumber, general and containerized cargo, and scrap iron. A cotton compress is at Gulfport.

Gulfport Harbor Basin is a State-owned and controlled harbor about 10 miles NW of Ship Island Pass. The rectangular deepwater ship basin is between two moles at the head of Gulfport Channel. Bert Jones Yacht Harbor, also protected by a mole, is adjacent to the E, and a commercial small-craft harbor is on the W side of the inshore end of the W mole.

Prominent features

(278) On a clear day vessels from the E, bound for Ship Island Pass, usually sight first the trees on the E part of Ship Island, then the light and Fort Massachusetts, a semicircular brick fort with sodded parapet, located near the W end of Ship Island. Vessels approaching from S may see Chandeleur Light first.

On the approach to Gulfport, a 15-story building and several water tanks in Gulfport are conspicuous. At night the occulting red lights on the tops of several radio towers can be seen from the sound. An aviation light is shown from a 62-foot tower at the municipal airport.

Ship Island Light (30°12'45"N., 88°57'59"W.), 30 (280)feet above the water, is shown from a skeleton tower on a concrete block. The light is on the same structure as Ship Island Range Rear Light.

Chandeleur Light (30°02'50"N., 88°52'40"W.), 65 feet above the water, is shown from a square pyramidal skeleton tower, brown below the gallery and black above, near the NW end of the northernmost of the Chandeleur Islands. The light presents a good radar target.

Shipping Safety Fairways

Vessels should approach Ship Island Pass and Gulfport through the prescribed Safety Fairways. (See 166.100 through 166.200, chapter 2.)

COLREGS Demarcation Lines

(283) The lines established for Ship Island Pass are described in **80.815**, chapter 2.

Channels

Ship Island Bar Channel leads for 6 miles NW from the Gulf in a dredged cut to Ship Island Pass; it is marked by lighted buoys. **Gulfport Channel** leads 10 miles NW through a dredged cut from the pass through Mississippi Sound to Gulfport Harbor Basin; it is marked by lighted ranges, lights, and lighted and unlighted buoys. Federal project depths are 38 feet for Ship Island Bar Channel, 36 feet for Gulfport Channel, and 32 to 36 feet for the Anchorage Basin. (See Notice to Mariners and latest editions of charts for controlling depths.)

A dredged commercial small-craft harbor and entrance channel are just W of Gulfport Harbor Basin. The entrance channel leads NW from Gulfport Channel for about 1.2 miles to the small-craft harbor. In November 2001, the controlling depth was 8 feet in the channel with 6 to 8 feet in the basin. The channel is marked by daybeacons, lights, and an unlighted buoy.

Anchorages

Large vessels can anchor outside the sound anywhere W of a line between Chandeleur and Ship Island Lights and have rather smooth water. Deep-draft vessels generally anchor within a 2-mile radius of Ship Island Pass Lighted Whistle Buoy SI in depths of 25 to 35 feet. Just S of the bar, the holding ground is good, and bar pilots report good anchorage 0.5 mile S of Ship Island Pass Lighted Gong Buoy 13.

Ship Island Harbor, N of Ship Island, is one of the best natural harbors on the Gulf Coast and is easily accessible at all times for vessels with drafts up to 20 feet. but there is swinging room for only one large vessel. Depths in the harbor range from about 20 to 30 feet with a soft bottom.

Dangers

Ship Island was cut into two parts by Hurricane (288) Camille in August 1969. The water between the existing parts is shoal with depths of 2 to 5 feet.

(289) The shoal off the W end of Ship Island at **West Point** is moving W and is unmarked. Mariners should use caution if passing between the shoal and the edge of Gulfport entrance channel.

A 250-yard-long submerged breakwater is at the opening of the harbor basin, W of the channel in the vicinity of Gulfport Channel Light 77.

Tides and currents

The diurnal range of tide is about 1.7 feet, but the (291) tides are greatly affected by the winds. NE to S winds raise the level of the water, and SW to N winds lower the level. A continued norther makes a current on Ship Island Bar of as much as 3 knots. Current velocities up to 1.5 knots have been measured in Ship Island Pass during normal weather.

Weather

Gulfport, located on Mississippi Sound, is sheltered (292) somewhat from temperature extremes of winter and summer by these waters and the Gulf of Mexico. At the port, summer temperatures climb to 90°F or above on about 68 days, while winter readings fall to freezing or below on just 17 days, on average. The average annual temperature for Gulfport is 68.2°F with an average high of 77.3°F and an average low of 58.6°F. July is the warmest month within an average temperature of 82.3°F and January is the coolest with an average temperature of 51.9° F. The warmest temperature on record is 103° F recorded in July 1980 and the coolest temperature on record is 4°F recorded in January 1985. Each month from June through September has recorded temperatures of 100°F or greater while each month, November through March has recorded temperatures below freezing. Precipitation is frequent year round, but most likely during summer when showers and thunderstorms are numerous. Twenty-eight percent of the annual rainfall occurs during the summer months of June, July, and August. The average annual precipitation at Gulfport is 63.77 inches. The wettest month is July, averaging 7.22 inches and October, the driest, averaging 2.92 inches. The wettest 24-hour period occurred in October 1967 when 10.7 inches accumulated. Extreme winds, both sustained and gusts, are most often associated with tropical cyclones and thunderstorms. However, extratropical cyclones and fronts produce a greater frequency of windspeeds in the 17- to 33-knot range (3 to

5 percent) from February through April. Visibilities are restricted mainly in precipitation and fog. Fog is most likely during winter and spring; visibilities fall below 0.5 mile on about 4 to 7 days per month from November through April.

The hurricane season represents a serious threat to marine activities at Gulfport. Since 1950, there have been eleven tropical cyclones that have come within 57 miles of Gulfport. During this century, tropical cyclone storm tides have exceeded 8 feet five times along this section of the coast; during Camille, a 21-foot storm tide was produced. The hurricane season extends from late May through early November, in general, while September is the major threat month. Most storms approach Gulfport from SE, S, and SW. Gulfport Harbor is not considered a hurricane haven. There is an absence of sheltered facilities and anchorages for deep-draft vessels, and there is the danger of severe shoaling in the narrow Gulfport Channel. It is recommended that deep-draft vessels, if unable to leave the region entirely, anchor in the shallow waters adjacent to the sand barrier islands about 10 miles offshore. Shallow-draft vessels, if not removed from the water, should seek shelter in the Back Bay of Biloxi and the creeks, bayous, and rivers leading inland.

Pilotage, Gulfport

Pilotage is compulsory for all foreign vessels and U.S. vessels over 250 net registered tons under register in the foreign trade. Pilotage is optional for American vessels laden with coastwise cargo not destined for foreign ports. Pilotage is available from Gulfport Pilots Association, Inc., 2300 Twentieth Street, Gulfport MS 39501, 601-863-6559 (Administrative only), FAX 601-863-6952. The Association services vessels bound for or from the State Port at Gulfport via Gulfport Ship Channel; also small vessels transiting Biloxi Channel when requested. Pilots board vessels in the vicinity of Gulfport Ship Channel Lighted Whistle Buoy GP (30°07'12"N., 88°52'42"W.) to 2 miles S of the W end of Ship Island. Buoy GP is about 18 miles SE of Gulfport Harbor or about 8 miles SE of W end of Ship Island. The 47-foot wooden hull pilot boat GULFPORT has a red hull with white superstructure. The 37-foot aluminium hull GULFPORT PILOT II has a red hull with white superstructure. The pilot boat monitors VHF-FM channels 16 and 10; works on channel 10. For boarding, the pilots request that the pilot ladder be rigged 1 meter (about 3 feet) above the water on the lee side and dead slow speed. The Mississippi State Port Authority at Gulfport monitors VHF-FM channels 16 and 10 (voice call "KJC-768 State Port"), 24-hours; works on channel 10. Arrangements for pilots may be made to 601-865-7636, or through the Port Authority (601-865-4300 or

radiotelephone), or through State Port, West Pier (601-865-4323) or through ships' agents. A 24-hour advice of ETA is requested; then at minus 12 hours, then at minus 2 hours if practical; minimum initial request not less than minus 2 hours of ETD for an outbound ship, and not less than 4 hours of ETA for an inbound ship.

Local Pilotage Regulations, Gulfport

The following regulations have been issued by the (295) Mississippi State Port Authority at Gulfport.

It shall be unlawful for any vessel of over 250 tons (296) net registered tonnage to enter the harbor or passes leading thereto without being piloted and under the direction of a licensed pilot, and all such vessels shall be subject to compulsory pilotage, except American vessels laden with coastwise cargo not destined for foreign ports.

Any vessel which by reason of its size or draft would (297) be unable to leave the deep water channel to avoid collision with an outbound or inbound ocean-going vessel shall be subject to compulsory pilotage, except as otherwise provided.

All vessels transporting class A, B, or C explosives or other dangerous cargoes shall be navigated under the direction of a licensed pilot. Vessels navigated under the direction of a pilot shall have preferential use of the Gulfport Harbor and Ship Channel.

All vessels shall contact the Port Authority on VHF-FM channel 16 to obtain permission to navigate the Gulfport Harbor and Ship Channel. The Port Authority may at its discretion impose additional requirements in the event of severe weather or other extraordinary circumstances.

Towage

Tugs to 2,000 hp are based at Gulfport. They monitor VHF-FM channel 16, use channel 10 as a working frequency, and have portable radiotelephone equipment to communicate with the pilots. Arrangements for tugs are usually made in advance by ships' agents or through the Gulfport Towing Company, 601-864-6171. Vessels usually enter or leave under their own power and use tugs only for docking, undocking, and shifting berths.

Quarantine, customs, immigration, and agricultural quarantine

(See chapter 3, Vessel Arrival Inspections, and ap-(301) pendix for addresses.)

Quarantine laws are enforced in accordance with (302) regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) There are hospitals and clinics in Gulfport.

Gulfport is a **customs port of entry.** (303)

Coast Guard

Coast Guard patrol boats moor on the W side of the (304) Bert Jones Yacht Basin at Gulfport.

Harbor regulations

(305) Gulfport Harbor is administered and controlled by the Mississippi State Port Authority at Gulfport. The Port Director is in charge of all operations and assigns berths.

Speed limit

The maximum speed for oceangoing vessels shall (306) not exceed 8 m.p.h. through the channel between Ship Island Bar and the entrance to the Gulfport Harbor, and shall not exceed 5 m.p.h. while passing any wharf, dock, or moored craft.

All craft passing other vessels, boats, barges, scows, etc., in motion, moored or anchored, shall slow down and take every precaution to avoid damage.

Wharves

The deep-draft facilities at Gulfport are on the E and W sides of Gulfport Harbor Basin and are owned by the Mississippi State Port Authority at Gulfport. For a complete description of the port facilities refer to Port Series No. 19, published and sold by the U.S. Army Corps of Engineers. (See appendix for address.) The alongside depths for the facilities described are reported; for information on latest depths contact local port authorities. Each of the facilities has rail and highway connections and water connections. All sheds and warehouses are equipped with sprinkler systems, and a fire and security watch is maintained. Cranes to 75 tons are available. An additional 30 acres of open storage is available.

East Pier Open Storage Wharf (30°21'25"N., 89°05'20"W.): 600-foot face; 30 feet alongside; deck height, 11 feet; 10 acres of open storage; receipt and shipment of general and containerized cargo, lumber, and steel products; shipment of wood chips; receipt of farm tractors; owned and operated by Mississippi State Port Authority at Gulfport.

Standard Fruit and Steamship Co. East Pier Terminal: immediately NW of East Pier Open Storage Wharf; 940-foot face; 29 feet alongside; deck height, 10 feet; 170,000 square feet covered storage; 10,000 square feet cold storage; shipment of general cargo, including paper, fertilizers, farm tractors, and frozen meats; receipt of canned fruits; operated by Mississippi State Port Authority at Gulfport and Standard Fruit and Steamship Co., Inc.

East Pier Banana Terminal: inner end of E side of (311)Harbor Basin; 515-foot face; 24 feet alongside; deck height, 10 feet; four gantry banana unloaders with capacity of 4,200 boxes per hour each; receipt of fruit and vegetables; operated by Standard Fruit and Steamship Co., Inc.

West Pier Dry Bulk and Container Wharf; outer end (312) of W side of Harbor Basin; 850-foot face; 30 feet alongside; deck height, 11 feet; container cranes to 35 tons and a bulk unloader, unloading rate of 1,200 tons per hour for 140-pound-per-cubic-foot materials; covered storage for 50,000 tons of ilmenite; 10 acres open storage; receipt and shipment of general and containerized cargo, ilmenite ore, and other dry bulk commodities; operated by Mississippi State Port Authority at Gulfport.

West Pier Cold Storage Wharf: immediately NW of Dry Bulk and Container Wharf; 800-foot face; 30 feet alongside; deck height, 11 feet; 52,000 square feet covered storage; 40,000 square feet cold storage; receipt and shipment of general cargo, including frozen and refrigerated foodstuffs; operated by Mississippi State Port Authority at Gulfport.

West Pier, North Wharf: immediately NW of Cold (314)Storage Wharf; 1,760 feet of berthing space; 30 feet alongside; deck height, 11 feet; 211,000 square feet covered storage; receipt and shipment of general cargo including foodstuffs; operated by Mississippi State Port Authority at Gulfport.

Supplies

Blended fuel is available by barge. Fuel oil is available at several commercial wharves by truck. Smaller vessels may be fueled at Commercial Small-craft Harbor East Wharf. Freshwater is piped to all berths. Marine supplies of all kinds are available.

Repairs

Gulfport has no shipyard facilities. Above- and below-the-waterline repairs are available.

Small-craft facilities

The Bert Jones Yacht Basin, in the yacht harbor close E of the Gulfport Harbor Basin, has facilities for yachts and party fishing vessels. Berths, electricity, diesel fuel, gasoline, ice, water, launching ramps, and marine supplies are available. There is a 30-ton mobile lift which can handle craft up to 60 feet for hull and engine repairs or storage. In June 1982, the reported controlling depth in the privately dredged channel to the basin was 7 feet. A channel dockmaster is on duty at the yacht basin.

Communications

Gulfport has regular steamer connections with Europe, South and Central America, and Far East ports. Banana ships call frequently at the port. The port is served by Norfolk Southern, Mid-South Rail Corporation, and Chesapeake Seaboard X Transportation, Inc., Railroads. Bus and motor freight lines connect the city with all points. The Gulfport Municipal Airport, about 3 miles NE of the port, has regular airline service.

Charts 11371, 11372

Cat Island Channel and its extension South Pass, lying between Cat Island and Isle au Pitre, form the most W connection between the Gulf and Mississippi Sound. The marked channel has a depth of about 12 feet, but leads to lesser depths in the sound. The passage is little used, except by small local craft; the chart is the best guide. Cat Island is wooded nearly its whole length E and W. The E shore of the island extends in a SSW direction for 4.5 miles with Raccoon Spit off the northernmost point, and low and narrow South Spit and Phoenix Spit on the S. A light is off Phoenix Spit.

In April 1993, a dangerous wreck was reported 0.3 mile NE of Cat Island Channel West Buoy 2 in about 30°11'22.2"N., 89°14'18.6"W.

Isle au Pitre, on the S side of Cat Island Channel, is low and marshy with scattered clumps of bushes.

The Intracoastal Waterway leads through the shoals in the W part of Mississippi Sound about 2 miles NW of Cat Island. (See chapter 12 for Intracoastal Waterway.)

Pass Marianne is an alternate passage through the (323) shoals extending across the W end of Mississippi Sound; natural depths are 7 to 18 feet. The pass is S of Tail of the Square Handkerchief Shoal and Square Handkerchief Shoal, and is frequently used by tugs and barges. The channel is marked by lights and daybeacons. Caution should be exercised when navigating this channel as it is subject to change. In 1966, a depth of 4 feet was reported about 0.3 mile WSW of Merrill Shell Bank Light. Grand Pass, about 7 miles S of Merrill Shell Bank Light, connects Mississippi Sound with Oyster Bay; the entrance to the pass is marked by a light.

Long Beach is a resort city on Mississippi Sound (324) about 2.5 miles W of Gulfport Harbor. There is some industry in commercial fishing and candy making. Gulf **Park College,** at the E end of the city, has a 1,000-foot pier marked by a light. The buildings at the college and a white church near the waterfront are prominent. The Long Beach small-craft harbor, formed by a long mole and jetty W of the college pier, has berths with water and electricity, ice, and launching ramps. The entrance to the small-craft harbor is marked by private lights and daybeacons. In June 1982, the reported controlling depth in the channel to the basin was 6 feet. In June 1987, a pile of rocks was reported obstructing the entrance to the harbor in about 30°20'31"N., 89°08'32"W. In June 1988, a sunken wreck was reported about 1 mile SE of the harbor entrance in about 30°20'12"N... 89°07'30"W. U.S. Route 90 highway passes through the city. Clinics and medical service are available. Buses serve the city.

Pass Christian is a city and summer resort 8 miles (325)W of Gulfport on the N shore of Mississippi Sound. A dredged entrance channel leads from Mississippi Sound to a harbor formed by two moles and protected from the S by two breakwaters extending from the moles. In May 1999, the controlling depth was 7 feet in the entrance channel and 4 to 4½ feet in the anchorage basin in the harbor. A light marks the seaward end of the E breakwater. The harbor entrance can be approached from the E or SW; both approaches are marked by lights. Sunken wrecks are in the harbor approaches. A large white church just E of the harbor is prominent.

Pass Christian Yacht Club is at the outer end of the (326) E mole. Fishing vessels unload at the bulkhead of the City Wharf on the E mole. Berths, gasoline, diesel fuel, water, electricity, ice, and launching ramps are available in the harbor. The **harbormaster** assigns berths in the harbor and has an office on the west mole.

There is some industry in fishing and garment making. U.S. Route 90 highway passes through the city. Clinics and medical services are available. Buses serve the city.

Henderson Point is at the W extremity of Pass Christian and on the E side of the entrance to St. Louis Bay. Just N of the point, and between the bridges over the bay, is a small bayou which is connected to Mallini Bayou. A marina is on the N side of the entrance. In December 2002, a reported depth of 3 feet could be carried to the marina. An obstruction covered about 3 feet was reported in about 30°18'46"N., 89°17'37"W.; caution is advised. Berths, electricity, gasoline, diesel fuel, water, ice, pump-out station, a launching ramp, dry storage and marine supplies are available at the marina. Engine repairs can be made. Above the marina the channel is crossed by several fixed highway bridges with a minimum width of 10 feet and clearance of 4 feet.

In June 1985, a sunken wreck was reported about 0.5 mile SE of Henderson Point in about 30°17'42"N., 89°16'54"W.

St. Louis Bay is an indentation in the N shore of Mississippi Sound, 11 miles W of Gulfport. Depths in the bay vary from 4 to 7 feet and decrease gradually

toward the shore. The bottom is soft. An unmarked submerged wreck, covered 3 feet, is SE of the entrance to the bay about 1.2 miles S of Henderson Point and about 0.4 mile N of Square Handkerchief Shoal. Two bridges cross the entrance to St. Louis Bay, the first, Chesapeake Seaboard X Transportation, Inc., (CSX) bridge has a swing span with a clearance of 13 feet through the W draw, and the second, the four-lane U.S. Route 90 highway bridge, has a bascule span with a clearance of 17 feet at the center. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KUF-721. An overhead power cable about 25 yards N of the highway bridge has a clearance of 60 feet except at the drawspan where the clearance is 80 feet. In 1982, the cable was reported to have been removed. (See 117.1 through 117.49, chapter 2, for drawbridge regulations.)

Bayou Portage, which empties into the E side of St. Louis Bay, is used by small craft as a harbor of refuge during minor storms. The Harrison County Development Commission has dredged a channel from the bay through Bayou Portage to a dredged slip that extends about 0.8 mile SSE to Pass Christian. An industrial area and port is under development on the slip. In November 2004, the controlling depth in the channel was 6.7 feet (7.6 feet at midchannel); thence in 2000, 8.5 feet was reported in the slip. Private lights and daybeacons mark the channel. In April 1979, four sunken wrecks were reported along the W side of the slip, extending 20 to 25 feet into the channel, between 30°20'11"N., 89°15'11"W., and 30°19'55"N., 89°15'05"W. A bascule bridge about 2 miles above the mouth of the bayou has a clearance of 29 feet. An overhead power cable crossing just E of the bridge has a clearance of 48 feet. A marina on the N side of the bayou, across from the dredged slip, has berths, electricity, launching ramp, wet and dry storage, water and ice available.

Wolf River empties into the E side of St. Louis Bay just above Bayou Portage. A dredged entrance channel leads N from a junction with Bayou Portage Channel for 1.6 miles to the mouth of the river. In July 2004, the controlling depth was 2.2 feet (2.6 feet at midchannel). The channel is marked by a daybeacon and lights.

De Lisle, a small village on De Lisle Bayou about (333) 1.4 miles above the mouth of the Wolf River, has a fish camp at which berths and ice are available. A natural launching ramp and gasoline are available nearby. The reported controlling depth from the Wolf River to the yard was about 5½ feet in June 1982; local knowledge is

The highway bridge over Wolf River, mile 1.3, near De Lisle has a fixed span with a clearance of 28 feet. Overhead power cables at the bridge have a least clearance of 73 feet. A fixed highway bridge about 6.8 miles above the river mouth has a clearance of 16 feet. An overhead power cable about 0.4 mile W of the bridge has a clearance of 83 feet.

(335) The dome of a private school at **Shell Beach**, about 3 miles W of De Lisle, is prominent from seaward.

Jourdan River empties into the W side of St. Louis (336) Bay. A dredged channel leads W in St. Louis Bay for 1.7 miles to the mouth of the river. In November 2004, the controlling depth was 4.3 feet (4.9 feet at midchannel). The channel is marked by a light and daybeacons. A marina on **Joes Bayou**, just inside the river entrance, has berths, electricity, water, ice, a launching ramp and wet storage available.

Watts Bayou empties into Jourdan River about 1 mile above the latter's mouth. In June 1982, the reported controlling depth in the bayou was about 5 feet; local knowledge is advised. A boatyard on the S side of the Jourdan River, between Joes Bayou and Watts Bayou, has a 50-ton lift for boat storage or hull, engine and electronic repairs.

Edwards Bayou flows into Watts Bayou at the mouth. In November 2002, the unmarked channel leading to the marina about a mile above the mouth had a reported controlling depth of about 5 feet. Berths, electricity, gasoline, diesel fuel, water, ice, pump-out station, a launching ramp, and marine supplies are available. Craft to 30 feet can be hauled out on a trailer for hull, engine and electronic repairs or covered storage.

Bayou La Croix enters Jourdan River from the W about 2.9 miles above the mouth. State Route 603 highway bridge crossing the bayou about 1.6 miles above the mouth has a 38-foot fixed span with a clearance of 12 feet. Overhead power cables on either side of the bridge have a clearance of 40 feet.

Bay St. Louis is a city and summer resort on the W side of St. Louis Bay. A depth of 7 feet can be carried to within 0.3 mile of the town. The city has a hospital and several clinics. The Seaboard System Railroad has freight service, and through bus service is available on U.S. Route 90 highway, which passes through the city.

The small-craft harbor of Bay and Waveland Yacht Club about 0.4 mile NW of U.S. Route 90 highway bridge is protected by two moles. In June 1982, a reported depth of 4 feet could be taken to the harbor. The harbor facilities, including berths and gasoline, are available to club members and friends.

Bayou Caddy, also known as Cadet Bayou, (See also (342) chart 11367) empties into Mississippi Sound 7 miles SW of St. Louis Bay. The bayou is entered from the sound through a dredged channel to a turning basin just inside the mouth, thence continues for about 1.6 miles to a second turning basin, thence about 0.1 mile to the head of the project. The channel is marked by

Three Mile Pass and Blind Pass lead to Bay Boudreau from the S part of the extreme W end of Mississippi Sound. The channels are little used; each is marked by a light. Bay Boudreau is a shallow body of water enclosed by irregularly shaped, low, swampy islands and other shallow bays.

Charts 11363, 11364, 11361

Chandeleur Sound and Breton Sound lie S of Mississippi Sound and N of the Mississippi River Delta; no clear line of demarcation lies between them-Chandeleur is the N of the two sounds.

Chandeleur Islands, forming the E boundary of Chandeleur Sound, comprise a narrow, crescent-shaped chain of low islands starting 10 miles S of Ship Island and continuing in a general S-by-W direction for a distance of 20 miles. SW from these islands are Curlew Island, Grand Gosier Islands, and Breton Islands. The Breton Islands mark the E limit of Breton Sound. Chandeleur Sound offers smoother water than the passage E of the islands to shallow-draft vessels bound from Mississippi Sound to Mississippi River.

In March 1992, shoaling to 14 feet had reportedly extended up to 1.9 miles NW of the N end of the Chandeleur Islands in about 30°04'42"N., 88°53'42"W.

The Mississippi River-Gulf Outlet Canal, which enters Breton Sound from the Gulf between Breton Islands and Grand Gosier Islands, is described in chapter 8 with the Mississippi River Channels.

North Islands, Freemason Islands, New Harbor Islands, and Old Harbor Islands are on the E side of Chandeleur Sound. Only fishermen and trappers frequent these, which are separated from each other by shallow unmarked channels. Protected anchorage for small boats in stormy weather can be found in Shoalwater Bay, Smack Channel, and other passages.

An unmarked sunken wreck is about 1.9 miles SSW of Old Harbor Island Shoal, in about 29°42.5'N., 89°03.0'W.

Chandeleur Islands, Curlew Island, Grand Gosier Islands, Breton Islands, North Islands, Freemason Islands, New Harbor Islands, and Old Harbor Island Shoal lie within the Breton Island Wildlife Refuge and are subject to the rules and regulations prescribed by the U.S. Department of Interior.

(351) Ostrica Canal extends N from the Mississippi River at the village of Ostrica about 21.5 miles above Head of Passes. The canal, together with channels through Bayou Tortillon and Quarantine Bay, affords passage to Breton Sound. The lock at the S end of Ostrica Canal is 247 feet long and 40 feet wide with a depth of 10 feet over the sills. The lock operates 24 hours a day. Red and green traffic lights at each end of the lock should be obeyed by all vessels waiting to enter the lock. The lock foreman can be contacted on VHF-FM channel 16 and uses channel 10 as a working frequency. In November 1994, the controlling depth was 4½ feet from the Mississippi River to the lock, thence 4 feet from the lock through Quarantine Bay to Light 16. The channel through Quarantine Bay is marked by private lights and buoys. A cluster of partially submerged pilings is reported in 29°25'15"N., 89°27'00"W., about 1 mile E of the entrance to Quarantine Bay channel from Breton Sound.

The W shore of Breton Sound consists of a network (352) of marshy islands separated by shallow bayous and bays. The land is so low that extremely high tides will submerge it in some sections nearly to the banks of the Mississippi River. Of the several shallow canals leading from the S part of Breton Sound to the river bank, only the Ostrica Canal and Baptiste Collette Bayou lead into the river. These canals are used by the large fleet of oyster boats operating in the sound to deliver their catch to canneries and packing houses on the river bank or to highways for trucking to New Orleans, and by oil companies for the development of oil fields. Oil drilling equipment will be found throughout the area. There are numerous unlighted oil well structures in Chandeleur and Breton Sounds and the waters to the W.

The waterways connecting Lake Borgne and (353) Chandeleur Sound via Lake Eloi are discussed under Lake Borgne.

A light (29°37'00"N., 89°29'06"W.) off Mozambique (354) Point marks the N side of the entrance to Black Bay from Breton Sound. A seasonal fog signal is at the light. The entrance to **Bayou Terre aux Boefs**, on the NE side of Black Bay, is marked by lights and daybeacons. In October 1994, the controlling depth was 5½ feet up the bayou to Delacroix; local knowledge is advised. Overhead power cables crossing the waterway have a minimum clearance of 30 feet. Delacroix is a small settlement on the waterway about 8 miles S of Lake Borgne. There is a marine lift at Delacroix that can handle craft up to 25 feet. Gasoline, diesel fuel, water, ice, and limited marine supplies may be obtained. From Delacroix, a highway extends to Poydras on the Mississippi, and thence to New Orleans. The marshlands about **Black Bay** are used extensively for hunting, trapping, and oil development. Private lights, buoys, and daybeacons mark oil company channels in Black Bay.

Charts 11371, 11367

Lake Borgne, the W extension of Mississippi Sound is partly separated from Mississippi Sound by Grassy Island, Half Moon (Grand) Island, and Le Petit Pass **Island** and their outlying shoals. Between the islands and shoals are several navigable passages including St. Joe and Le Petit Passes. On the NW shore, Lake Borgne is separated from Lake Pontchartrain by a low marsh through which the Rigolets and Chef Menteur Pass are the principal passages. Lake Borgne is about 23 miles in length, 5 to 10 miles in width, and 6 to 10 feet in depth. Charted and uncharted obstructions are in the lake; caution is advised. The shores of the lake are low, marshy, and sparsely populated. The lake is of importance chiefly as a connecting link for the Intracoastal Waterway. (See chapter 12 for Intracoastal Waterway.) Lake Borgne is tidal, but the tides are small and greatly modified by the winds. The tidal currents through St. Joe Pass have velocities exceeding 1.5 knots at times.

Vessels coming from the E generally enter Lake Borgne through St. Joe (Grand Island) Pass, which leads between Half Moon (Grand) Island and Lighthouse Point (Lower Point Clear). The channel is marked and is a portion of the Intracoastal Waterway. (See chapter 12 for Intracoastal Waterway.)

In July 1988, a dangerous wreck was reported (357)about 0.5 mile NNW of Half Moon Island in about 30°09'24"N., 89°25'06"W.

Le Petit Pass, between Le Petit Pass Island and Malheureux Point, is little used.

Pearl River empties into Lake Borgne from the N. The river serves as a boundary between the States of Mississippi and Louisiana. Principal commerce on the river is in barge shipment s of liquified oxygen and hydrogen and large structures for NASA. A dredged channel leads from N of the Intracoastal Waterway in Lake Borgne for 1.1 miles to the mouth of the Pearl River. In May 1980, the controlling depth from Lake Borgne to deeper water in the river was 6½ feet. The channel is marked by lights and daybeacons. The Chesapeake Seaboard X Transportation, Inc., (CSX) swing bridge, with a clearance of 14 feet, crosses Pearl River at Baldwin Lodge, about a mile above the mouth; the channel is through the E draw. (See 117.1 through 117.59, **117.488**, chapter 2, for drawbridge regulations.)

About 3.5 miles above the mouth, Pearl River joins with Little Lake Pass, which leads W to Little Lake. East Pass, at the W end of Little Lake, connects the lake and The Rigolets. A dredged channel extends from The Rigolets ENE through the East Pass, Little Lake, and Little Lake Pass, thence up the Pearl River to a turning basin and slip at the NASA National Space **Technology Laboratory** near Gainesville, about 14 miles above the mouth of Pearl River. In 1972, the controlling depth from East Pass to Pearl River was 7 feet except for shoaling along the edges, thence in 1976, 3 feet in Pearl River. The channel is marked by lights and daybeacons.

Port Bienville Industrial Park, a dredged slip and waterfront industrial park under development by the Hancock County Port and Harbor Commission, is entered through a privately dredged channel on the E side of the river about 1.5 miles above Little Lake Pass. The channel is marked by a light and daybeacons. Several shipyards at the park can perform complete repairs to barges to 150 tons and above-the-waterline repairs to ships at their berths using portable equipment.

U.S. Route 90 highway bridge across the Pearl River at **Pearlington**, 4 miles above the mouth, has a swing span with a clearance of 10 feet through the E draw. About 5.3 miles above this swing bridge, Interstate Route 10 fixed bridge with a clearance of 73 feet crosses the river. An overhead power cable just S of the fixed bridge has a clearance of 99 feet.

A marina just above U.S. Route 90 highway bridge has berths, electricity, gasoline, water, ice, a launching ramp, and a 3-ton hoist that can haul out craft for covered dry storage.

From the N side of Little Lake, just W of Little Lake (364)Pass, a marked channel leads to **North Pass** and a junction with West Middle River. From North Pass an unmarked channel leads W to East Mouth, which connects to the mouth of the West Pearl River, thence, through **West Mouth**, to The Rigolets; about 7 feet can be carried over this route to the mouth of West Pearl River, thence about 8 feet to The Rigolets.

A highway bridge crossing East Middle River, a tributary of Old Pearl River, about 3.4 miles above Pearl River has a 45-foot fixed span with a clearance of 11 feet; an overhead power cable is at the bridge. A highway bridge crossing Middle River, a tributary of Old Pearl River, about 3.9 miles above Pearl River has a fixed span with a clearance of 10 feet; an overhead power cable is at the bridge. A highway bridge crossing West Middle River about 5 miles above North Pass has a fixed span with a clearance of 10 feet; an overhead power cable is at the bridge.

West Pearl River empties through West Mouth into the E end of The Rigolets. A dredged channel leads

from the mouth of West Pearl River to Bogalusa, La., a distance of about 50 miles; three locks are each 65 feet wide and 310 feet long, with 10 feet over the sill. In June 1999, the reported controlling depths were 10 feet above the entrance, and thence in 1982, 4 feet to Bogalusa. About 5 miles above the junction of East Mouth and West Mouth there is a vertical lift bridge (U.S. Route 90) with a clearance of 10 feet down and 50 feet up. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KTD-552. The overhead cable 1.9 miles above this bridge has a clearance of 55 feet. At Gauss Bluff, about 11 miles above the mouth, the twin fixed spans of Interstate Route 10 highway bridges with clearances of 35 feet cross the river. Near the town of Pearl River, 19 miles above the mouth, there are three bridges; the first two are the twin fixed spans of the Interstate Route 59 highway bridge with clearance of 35 feet. About 200 yards farther upstream, the Southern Railroad bridge has a swing span with a clearance of 7 feet. (See 117.1 through 117.59 and 117.511, chapter 2, for drawbridge regulations.) The overhead power cables at the railroad bridge have clearances of 60 feet.

The Rigolets is a deep passage 7 miles long and about 0.4 mile wide connecting Lake Borgne and Lake Pontchartrain. The pass is bounded by low, marshy shores. In August 2002, the controlling depth was 11.2 feet. The entrance from Lake Borgne is 8 miles W of St. Joe Pass. Two swing bridges cross The Rigolets. The first, the Chesapeake Seaboard X Transportation, Inc. bridge about 0.4 mile N of Catfish Point in Lake Borgne, has a clearance of 11 feet; navigation is through the E draw. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197. The second, about a mile E of Lake Pontchartrain, is U.S. Route 90 highway bridge that has a clearance of 14 feet. The bridgetender monitors VHF-FM channel 13; call sign KYZ-723. (See 117.1 through 117.49, chapter 2, for drawbridge regulations.)

Currents

by winds. They set with great velocity through The Rigolets at times, and especially through the draws of the bridges. Velocities of 2.5 knots off Rigolets Light 5 and 3.8 knots at the railroad bridge have been observed. At the railroad bridge westerly currents set WSW onto the fender on the SW side of the draw, and easterly currents set E by N onto the fender on the NE side. The current has an average velocity of 0.6 knot.

The bridge should not be approached closely until the draw is opened, and then only with caution.

Rigolets either N or S of the Intracoastal Waterway crossing. Depths of 12 feet or more are available for vessels entering Blind Rigolets via the Intracoastal Waterway. Piles cross the width of the channel approximately 300 feet S of the Chesapeake Seaboard X Transportation, Inc. (CSX) bridge, which crosses Blind Rigolets 0.3 mile N of the Intracoastal Waterway. Mariners are cautioned not to attempt passage of this bridge. An overhead power cable, 250 feet N of the bridge has a clearance of 25 feet.

(371) **Fort Pike,** an old circular brick fort with sodded top, is just inside the W entrance to The Rigolets.

Small-craft facilities

(372) Small-craft facilities on **Fort Pike Canal**, E of the fort, and on **Geoghegan Canal**, NE of the fort, can provide berths, electricity, gasoline, diesel fuel, water, ice, storage, launching ramps, and hull, engine, and electronic repairs. The largest mobile hoist, on the NW side of Geoghegan Canal just above the entrance, can haul out craft to 63 feet.

In June 1982, the reported controlling depths were 4½ feet in Fort Pike Canal and 8 feet in Geoghegan Canal.

(374) Lake St. Catherine can be reached through Fort Pike Canal or through a natural unmarked channel in Sawmill Pass. The lake has numerous oil well structures.

Chef Menteur Pass, a connecting passage between (375) Lake Borgne and Lake Pontchartrain, is located about 10 miles SW of The Rigolets. The pass is about 6 miles long and 0.2 mile wide. There is a considerable range in depths in the pass with shallow water off the entrances. The pass, used by pleasure and fishing craft, is usually entered through the Intracoastal Waterway. A light marks the entrance from Lake Borgne, and another light marks the entrance from Lake Pontchartrain; two lights mark the Intracoastal Waterway crossing. A new Intracoastal Waterway alinement channel, completed in 1972, crosses Chef Menteur Pass 1 mile SE of the original Intracoastal Waterway crossing. A light and daybeacon mark the new crossing. Two swing bridges cross the Chef Menteur Pass. The Chesapeake Seaboard X Transportation, Inc. (CSX) bridge has a clearance of 10 feet. The U.S. Route 90 highway bridge, crossing 0.3 mile NW of the railroad bridge, has a clearance of 11 feet. (See 117.1 through 117.49 and 117.436, chapter 2, for drawbridge regulations.) The town of Chef **Menteur** is between the bridges. A large spherical tank 0.4 mile NW of the highway bridge is conspicuous.

In February 2001, shoaling to 3 feet was reported across the entrance from Lake Pontchartrain.

Small-craft facilities

Several small-craft facilities are on both sides of the pass from the highway bridge N for about 1 mile. Berths, electricity, gasoline, diesel fuel, water, ice, storage, launching ramps, and marine supplies are available, and hull and engine repairs can be made. The largest mobile hoist, at a boatyard about 0.9 mile NE of the highway bridge, can handle craft to 20 tons.

(378) **Bayou Sauvage** is an important waterway leading about 2.7 miles W from Chef Menteur Pass about 0.3 mile NW of the highway bridge. In February 2001, depths of 13 feet were reported in the bayou. There are fish camps, marinas, and a shipyard on the bayou. Several oil companies maintain marine bases on the bayou. The shipyard builds steel tugs and crew boats to 228 feet. Gasoline, diesel fuel, water, ice, launching ramps, and marine supplies are available.

Charts 11371, 11369, 11364, 11367

Bayou Bienvenue empties into the W side of Lake Borgne about 5 miles SW of Chef Menteur Pass. The bayou connects Lake Borgne with the Mississippi River-Gulf Outlet Canal, and thence leads W for about 6.3 miles. In February 1996, the controlling depths were 5½ feet across the lake bar, thence 4½ feet to the Mississippi River-Gulf Outlet Canal and to State Route 47 highway bridge about 2 miles W. The bridge has a 17-foot fixed channel span with a clearance of 3 feet. An overhead power cable with an unknown height is immediately W of the bridge. Another overhead power cable with a clearance of 60 feet crosses the bayou about 1 mile W of the Mississippi River-Gulf Outlet Canal.

Bayou Dupre empties into the SW end of Lake Borgne at Martello Castle, about 3.5 miles SSE of Bayou Bienvenue. A dredged channel leads from Lake Borgne into and through Bayou Dupre and Violet Canal to Violet. In October 1995, the controlling depth was 6 feet over the bar in Lake Borgne and thence 5 feet through Bayou Dupre to the head of the canal at Violet. In November 2002, unmarked pile clusters were reported in the vicinity of Bayou Dupre Light 1. An overhead power cable with a clearance of 60 feet crosses the canal about 1.2 miles E of Violet. Twin fixed highway bridges with a clearance of 35 feet are about 0.4 mile E of Violet. Petroleum products and fish are the principal commerce on the bayou. Shrimp fishermen report that the canal is difficult to navigate during winter low water. A light and daybeacons mark the entrance to the bayou. A small marina at Violet provides gasoline, berths, water, electricity, ice, and a hoist that can handle small craft to 3 tons.

Bayou Yscloskey empties into the southernmost (381)part of Lake Borgne. A dredged channel leads from Lake Borgne to the mouth of Bayou Ysclosky. In April 1997, the controlling depth was 5 feet. The channel is marked by a light and daybeacons. From the mouth of the bayou, the channel is privately maintained for 2 miles to Bayou la Loutre at the settlement of **Yscloskey**. In April 1997, the controlling depth was 6½ feet to Yscloskey. Overhead power cables crossing Bayou Yscloskey have a minimum clearance of 30 feet. Gasoline, diesel fuel, water, ice, and limited marine supplies are available on the bayou. From Yscloskey, Bayou la **Loutre** flows SE for 25 miles to Eloi Bay (chart 11363). The dredged channel in the bayou is privately maintained from Yscloskey to Hopedale, a small settlement 3 miles SE. In April 1997, the controlling depth was 6 feet. The bridge over Bayou la Loutre at Yscloskey has a vertical lift span with a width of 45 feet and clearance of 2 feet down and 53 feet up. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) An overhead power cable crossing at Hopedale has a clearance of 68 feet. Hopedale has several wharves at which gasoline, diesel fuel, water, ice, and marine supplies are available. A small boatyard at Hopedale has a mobile hoist that can haul out craft to 45 tons. Repairs are normally made by the boat owners.

From Hopedale, Bayou la Loutre Channel is a Federal project. In April 1997, the controlling depths were 5 feet to Bayou St. Malo, thence 5 feet through **Bayou** Eloi and the bar channel to deep water in Lake Eloi. Lights and daybeacons mark the entrance to Bayou Eloi in Lake Eloi.

Bayou St. Malo, a dredged channel, leaves Bayou la Loutre 5 miles E of Hopedale and flows NW for 5 miles to Lake Borgne. Principal traffic on the waterway consists of commercial fishing boats, oil well equipment, and support vessels. In October 1994, the controlling depth was 2½ feet to Lake Borgne and thence 2 feet in the channel across the bar. A light marks the bar channel.

Chart 11369

Lake Pontchartrain, roughly elliptical in shape, is 36 miles long, 22 miles wide at the widest part, 10 to 16 feet deep, and lies N of the Mississippi River at New Orleans. The lake connects with the Mississippi River through the Inner Harbor Navigation Canal; with Lake Borgne through The Rigolets and Chef Menteur Pass; and with Lake Maurepas through Pass Manchac and North Pass. Considerable commerce is carried on Lake Pontchartrain, the principal items being sand and

gravel, shell, stone, petroleum products, lumber, cement, chemicals, steel products, and foodstuffs.

The periodic tide is negligible, but the variation in the water level due to winds has an extreme range of 3.5 to 4 feet. It is reported that the surface of the lake is lowered at least 2 feet during the winter when NW winds prevail.

There are numerous well platforms, piles, pipes, and other reported obstructions in Lake Pontchartrain. Caution is advised.

Three causeways cross the E end of Lake Pontchartrain. U.S. Interstate Route 10 highway causeway, about 3.5 miles W of The Rigolets and crossing between Pointe aux Herbes and Howze Beach, has a bridge with a fixed span over the navigation channel about 1.2 miles from its NE end with a clearance of 65 feet. U.S. Route 11 highway causeway, W of U.S. Interstate Route 10 highway causeway and crossing from Pointe aux Herbes to North Shore, has two bascule bridges; one, about 1 mile SW of North Shore, has a clearance of 13 feet; the other, about 0.4 mile NE of Pointe aux Herbes, has a clearance of 12 feet. The N span is equipped with a radiotelephone. The bridgetender can be contacted on VHF-FM channel 13; call sign, KMC-226. The overhead power cable just W of this bridge has a clearance of 94 feet. The Southern Railway causeway, W of U.S. Route 11 highway causeway and crossing between South Point and North Shore, has a bascule bridge about 1 mile SW of North Shore. The bridge has a clearance of 4 feet closed and 68 feet open (leaf coverhangs the channel). The bridgetender monitors VHF-FM channel 13; call sign KA-5070. The overhead power cable just W of this bridge has a clearance of 12 feet but is submerged at the channels. (See 117.1 through 117.59 and 117.467, chapter 2, for drawbridge regulations.)

Small-craft facilities

Small-craft facilities at the N and S ends of U.S. Interstate Route 10 highway causeway can provide berths, gasoline, water, ice, launching ramps and some marine supplies.

Lake Pontchartrain Causeway, twin toll highway bridges, extends 20.9 miles across Lake Pontchartrain from Indian Beach on the S shore to Lewisburg on the N shore. Five bridge openings, four twin fixed and one twin bascule, are at intervals of about 3.5 miles along the causeway. The first three openings N from Indian Beach are crossed by twin fixed bridges with clearances of 22 feet, 50 feet, and 22 feet, respectively. The next opening is crossed by twin bascule spans with clearances of 42 feet, and the northernmost opening is crossed by a twin fixed bridge with a clearance of 22

feet. (See 117.1 through 117.59 and 117.467, chapter 2, for drawbridge regulations.)

NOTICE TO COMMERCIAL MARITIME INTEREST IN LAKE PONTCHARTRAIN

Local Regulations. (390)

Effective July 14, 1988, the Louisiana Legislature (391) passed and Governor Roemer signed into law La. Acts (1988) No. 552, regulating navigational safety near the Lake Pontchartrain Causeway Bridges. Key features of this Act:

- (1) Require all tugs, towboats, self-propelled (392) dredges, jack-up barges, jack-up rigs and all self-propelled vessels of one hundred net tons or greater, or one hundred feet in overall length or greater, and all vessel flotillas of one hundred aggregate net tons or greater operating on Lake Pontchartrain to be equipped with Loran C Equipment suitable for use with the Lake Pontchartrain Collision Avoidance Warning System (CAWS);
- (2) Establish a "prohibited zone" paralleling each (393) side of the entire length of the Lake Pontchartrain Causeway Bridge and extending outward for a distance of one mile from the easterly and westerly outboard sides of the causeway bridge twin spans;
 - (3) Prohibit all privately-owned vessels within the classes listed in paragraph (1), above, from entering, navigating, mooring, or anchoring in any manner within the "prohibited zone," except: (a) as required to navigate through the Lake Pontchartrain Causeway Bridge openings upon such course and upon such directions as may be given by the causeway bridge tender, (b) as required in an emergency to protect against loss of life or property, or (c) as otherwise permitted in accordance with permitting procedures set forth by the Act and the Rules and Regulations of the Greater New Orleans Expressway Commission;
- (4) Provides for the assessment of a civil penalty in (395) the amount of up to \$1000 per vessel per violation against the owner, operator, or charterer of any vessel within the classes listed in paragraph (1), above, which impermissibly enters the "prohibited zone," or which enters the "prohibited zone" without the Loran C equipment required by the Act;
 - (5) Requires that all collisions, accidents or other casualties involving a vessel within any of the classes listed in paragraph (1), above, be reported to the Greater New Orleans Expressway Commission within 48 hours if such casualty has resulted in death or injury, or within 5 days, if such casualty resulted in property damage exceeding \$200.

At its regular meeting on October 4, 1988, the Greater New Orleans Expressway Commission adopted rules and guidelines for the administration and enforcement of Act No. 552.

ALL MARINERS ARE ADVISED THAT THE (398) GREATER NEW ORLEANS EXPRESSWAY COM-MISSION STRICTLY ENFORCE THE PROVISIONS **OF ACT NO. 552.**

Three pipelines, marked by private lights, cross the lake. The first extends from the E shore about 1 mile S of The Rigolets W to Pointe aux Herbes. The second begins at a point about 0.75 mile WSW of South Point and extends across the lake in a N direction. The third crosses the lake beginning at a point in the vicinity of Bayou Piquant and extends in a NE direction to Mandeville.

Middle Ground is the shoal portion of Lake (400) Pontchartrain near The Rigolets. North Shore Channel extends across the NE part of Middle Ground between The Rigolets and deeper water in the vicinity of U.S. Interstate Route 10 fixed bridge. In July 1999, the reported controlling depth was 11 feet. The channel is marked by daybeacons and lighted ranges.

Bayou Bonfouca, which empties into Lake Pontchartrain 3 miles NW of the Southern Railway causeway N swing bridge, is the approach to the town of Slidell. There is some waterborne commerce in shell, sand, and gravel. A dredged channel leads for about 6 miles from deep water in Lake Pontchartrain to Slidell. In August 1994, the controlling depth was 6 feet across the bar, thence 7 feet to the State Route 433 highway bridge at Slidell. In January 1993, a barrier was constructed across the bayou at about mile 6.1 and marine traffic is prohibited above this point. The waterway will be closed for approximately 36 months to facilitate hazardous waste clean-up. The channel across the bar is marked by lights, buoys, and daybeacons. The bridge at Slidell has a swing span with a clearance of 6 feet.

The bridgetender monitors VHF-FM channel 13; (402) call sign KMC-226. The bridgetender lives near the bridge and will open on signal, but there may be a slight delay. The overhead power cable at the bridge has a clearance of 58 feet. In 1982, the cable was reported to have been removed. (See (See 117.1 through 117.59 and 117.433, chapter 2, for drawbridge regulations.) An overhead power cable about 0.4 mile above the bridge has a clearance of 59 feet.

Slidell is a town on U.S. Route 11 highway and the Southern Railway leading to New Orleans. A well-equipped shipyard has facilities for construction or repair of steel or wooden vessels including a commercial graving dock 350 feet long, 70 feet wide, with 20 feet over the sill, two marine ways that can handle craft up to 225 feet, and a 60-ton gantry crane, and a 300-ton floating crane. Tugs, barges, and diving equipment are available for towing or salvage work. Other

facilities at the yard include several loading slips and a railroad siding. Gasoline and water are available at a marina on the W side of the river just above the highway bridge.

Bayou Liberty (Liberty Bayou) joins Bayou Bonfouca 0.5 mile above the mouth. In August 1994, the controlling depth was 3½ feet for about 5.2 miles to **Camp Salmen**, thence 4 feet to the railroad bridge at the head of the channel. A temporary pontoon bridge crosses the bayou about 1.5 miles above its junction with Bayou Bonfouca. The bridge is operated by cables that are suspended near the water surface when the bridge is being opened or closed and dropped to the bottom when the bridge is not in motion. Caution is advised in the vicinity of the bridge. Do not attempt to pass through the bridge until it is fully opened and the cables are dropped to the bottom. (See 117.1 through 117.59 and 117.469, chapter 2, for drawbridge regulations.) An overhead power cable just below the swing bridge has a clearance of 75 feet. Small-craft facilities on the S side of the bayou below the highway bridge provide berths with water and electricity, ice, a launching ramp, and marine supplies. A 30-ton mobile hoist can haul out craft for complete repairs.

Lacombe Bayou empties into Lake Pontchartrain (405) 4.5 miles W of Bayou Bonfouca. A dredged channel leads from the entrance bar in Lake Pontchartrain to a fish hatchery about 7.1 miles above the mouth of the bayou. In August 1994, the controlling depth was 5½ across the bar, thence 7½ feet for 5.9 to the highway bridge, thence in December 1984, 4 feet to Mile 7.8. The channel is obstructed by submerged logs and overhanging trees above this point. The entrance channel is marked by a light and a lighted 016° range. The front range marker is lighted.

The Gulf, Mobile, and Ohio Railroad bridge about 4.5 miles above the mouth and U.S. Route 190 highway bridge at Lacombe have swing spans with a minimum channel width of 45 feet and clearances of 5 feet. (See 117.1 through 117.59 and 117.463, chapter 2, for drawbridge regulations.) Overhead power cables crossing at the bridges have a minimum clearance of 60 feet. Commerce on the bayou includes shipments of shell, sand and gravel, and drilling equipment. The bayou has several fish camps and a seaplane base.

Mandeville is a summer resort on the N shore of Lake Pontchartrain 20 miles N of New Orleans. Many of the boat landings on the N shore are in ruins. A protected landing is in Bayou Castine. The entrance to the bayou is protected by jetties and a detached breakwater W of the channel. Lights mark the entrance to the bayou and the E end of the breakwater. An overhead power cable with a clearance of 60 feet crosses the bayou. In August 1994, the controlling depth was 5 feet across the bar and in the bayou.

Launching ramps and a municipal wharf at which berths, water, and electricity are available are on the W side of the entrance. A marina and boatyard on the bayou has a 15-ton mobile hoist that can haul out craft for complete repairs. Berths, electricity, water, a sewage pump-out facility, and marine supplies are available. In 1982, the basin had reported depths of 5 feet.

Tchefuncta River flows into Lake Pontchartrain about 21 miles N of New Orleans. Commerce on the river is in shell and steel products. A dredged channel leads from the 10-foot depth in Lake Pontchartrain for about 12.2 miles up Tchefuncta River and its tributary, Bogue Falaya, to the town of Covington, LA. In March 2001, the controlling depth was 6 feet across the bar, through the entrance; thence in 1994, 10 feet for about 1.7 miles to Madisonville, thence 4 feet to Abita River, thence 3 feet for about 1.1 miles. In June 1993, shoaling to 4 feet was reported between Daybeacons 4 and 6 in about 30°22'24"N., 90°10'12"W. The entrance is marked by a light, a lighted range, and daybeacons. State Route 22 highway bridge crossing the river at Madisonville has a swing span with a clearance of 1 foot. (See 117.1 through 117.49 and 117.500, chapter 2, for drawbridge regulations.) An overhead power cable with a clearance of 85 feet crosses the river about 6 miles above the bridge at Madisonville.

The twin fixed spans of Interstate Route 12 highway bridge with a clearance of 30 feet cross the river about 9.4 miles above the mouth.

Tows through the bridges are limited to one barge. The towing vessel must be made up rigid, astern of the barge, and the barge shall be pushed through the draw at dead slow speed and under full control.

Madisonville, a town 1.5 miles up Tchefuncta River, has berths at public landings above and below the W side of the bridge. Two shipyards build commercial vessels and barges, and another repairs company-owned dredging equipment. There are several marinas above the highway bridge. Berths, electricity, gasoline, diesel fuel, water, ice, marine supplies, and launching ramps are available.

An overhead power cable extends generally around the perimeter of the W and SW part of Lake Pontchartrain, from the shore near Madisonville to a point about 6.4 miles W of New Orleans. Clearance is 40 feet throughout except for 60 feet where the cable crosses over the entrance to the bar channel to Tangipahoa River, and 90 feet over the entrance to Pass Manchac. Private lights partly mark the cable.

Tangipahoa River is a narrow stream flowing into Lake Pontchartrain 6 miles SW of Tchefuncta River. A dredged channel leads from Lake Pontchartrain across the bar to the river mouth. In March 1997, the controlling depth was 1 foot across the bar, thence 5½ feet for 7.4 miles to Lee Landing. Trees obstruct the river above this point. In February 1993, shoaling to 1 foot reportedly extended about 100 feet in a SW direction from Light 8. Lights and daybeacons mark the entrance channel. Gasoline, berths, water, electricity, ice, and launching ramps are available at Lees Landing. There are numerous overhead power cables, with minimum clearance of 60 feet, over Tangipahoa River up to Lees Landing.

Bedico Creek branches E from Tangipahoa River (415) about 2.3 miles above its mouth. In August 1994, the controlling depths in the creek were 3 feet to Traino (Wallace) Landing.

Pass Manchac is a passage 5.5 miles long connect-(416) ing Lake Pontchartrain with Lake Maurepas. Principal commerce is in shell and petroleum products. The approaches in both lakes are across long bars, which limit the utilization of the relatively deep water inside the pass. From Lake Pontchartrain there are two approach channels, North Channel and South Channel. The E side of the entrance to each is marked by a light. Both lead to Pass Manchac Light on the N point at the E end of the pass. In August 1994, the controlling depth was 6 feet across the bar in North Channel, thence 6 feet across the bar in South Channel, thence 23 feet to the pass.

Once over the bar, midchannel courses should be (417) followed through Pass Manchac. Stinking Bayou and North Pass branch from the N side of Pass Manchac about 1.3 miles W of the E entrance. Stinking Bayou leads ENE. North Pass meanders WNW parallel with Pass Manchac and connects with Lake Maurepas.

At the W end of North Pass just E of the bridges is **Port Manchac,** a shallow-draft freight terminal on the N shore owned by the South Tangipahoa Parish Port Commission. The facility is about 6 miles W of Lake Pontchartrain. The 160-foot wharf is operated by South Tangipahoa Parish Port Commission, which handles general and containerized cargo. Warehouses to 30,000 square feet and a 60-foot lower docking facility are available. Barges with a 9-foot draft are loaded and discharged by heavy lift cranes and lift trucks. A 1,800-foot railroad siding with three in-car trans-loading ramps is at the port. Easy highway access is available via Interstate Route 55 and U.S. Route 51. Mainline railroad service is provided by Illinois Central Transportation Company on a daily basis. General and containerized cargo, such as lumber, plywood, agriculture products, paper, steel, fertilizers, gravel, oil field supplies, and equipment and machinery for export/import of domestic markets are trans-loaded.

At the W end of the pass, a marked northerly chan-(419) nel and an unmarked southerly channel separated by a shallow middle ground lead into Lake Maurepas. In August 1995, the controlling depth in the N channel was 7½ feet.

Overhead power cables crossing over the pass (420) about 0.3 mile and 2 miles from the E entrance have clearances of 90 feet and 76 feet, respectively. Three bridges and the remains of two former bridges cross the W end of the pass. The easternmost bridge, the Illinois Central Railroad bridge, has a bascule span with a clearance of 56 feet and is equipped with a radiotelephone. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KC-9501. (See 117.1 through 117.59 and 117.484, chapter 2, for drawbridge regulations.) An overhead power cable at the bridge has a clearance of 64 feet. Immediately W of the Illinois Central Railroad bridge are the remains of the former railroad and highway bridges (center portions removed), and U.S. Interstate Route 55 fixed highway bridge with a clearance of 51 feet. A fixed highway bridge immediately W of the U.S. Interstate Route 55 highway bridge has a clearance of 50 feet.

Note: Tows passing through Pass Manchac bridges are limited to no more than two barges, not to exceed a combined tow length of 400 feet, excluding the towboat. Operators wishing to pass tows exceeding these limits must request and receive permission from the Captain of the Port, New Orleans. (See **162.75(b)(5)(vi)**, chapter 2.)

Gasoline, diesel fuel by truck, water, ice, and some marine supplies are available at wharves just E of the N and S ends of the U.S. Interstate Route 55 highway bridge.

Lake Maurepas, lying W of Lake Pontchartrain, is 11.5 miles long in a NE and SW direction and from 4 to 8 miles wide. Depths range between 7 to 12 feet, but numerous submerged tree stumps are reported along the lake shore. Strangers are advised to keep at least a mile offshore and to approach the entrances to the tributaries with caution. No cities or towns are along the lake shores, which are low and thickly wooded. Other than Port Manchac on the N shore at the W end of North Pass just E of the bridges (described earlier in this chapter, under Pass Manchac), the lake is of little commercial importance except as the approach to Tickfaw and Amite Rivers, which have some trade to New Orleans.

Tickfaw River flows into the N end of Lake Maurepas about 3.5 miles NW of Pass Manchac. The entrance is marked by a light and a daybeacon on the W side of the mouth. A large shoal extends S of the light on the W side of the entrance, and stumps are on the E side. In January 1996, the controlling depth was 51/2 feet across the bar, thence 12 feet to Blood River, thence 6 feet to Horse Bluff Landing. Above this point, snags and trees obstruct the river. State Route 22 highway bridge crossing the river about 6.2 miles above the mouth, just below the junction with Blood River, has a fixed span with a vertical clearance of 50 feet. Two overhead power cables, just W and parallel to the swing bridge and about 2 miles W of the bridge, have clearances of 70 feet. A marina just below the S side of the bridge has berths, gasoline, diesel fuel, electricity, water, ice, launching ramps, and marine supplies.

Natalbany River, a tributary of Tickfaw River, in (425) January 1996, had a controlling depth of 7½ feet for about 4.5 miles, thence 2 feet for 3.5 miles to the head of the Federal project, about 1.3 miles above the highway bridge at Springfield.

Ponchatoula River, a tributary of Natalbany River, joins that river about 3.3 miles above the mouth. In August 1994, the controlling depth was 2 feet for 3.3 miles; the river is blocked by fallen trees at this point. State Route 22 highway bridge at Wadesboro has an 18-foot fixed span with a clearance of 4 feet.

Blood River, a tributary of Tickfaw River, joins that (427) river 6.3 miles above the mouth. In August 1994, the controlling depth was 8 feet for 3.5 miles; overhanging trees prevent navigation above this point. Blood River has several small marinas about 0.9 mile above its junction with the Tickfaw River at Warsaw Landing. Berths, water, electricity, gasoline, ice, limited marine supplies, and launching ramps are available.

Principal shipment on Tickfaw, Natalbany, (428) Pontchatoula, and Blood Rivers is shell.

(429) Amite River empties into Lake Maurepas 8 miles W of Pass Manchac. The entrance is marked by a light. Principal shipment on the river is shell.

In entering Amite River, pass well to the E of the light; submerged stumps are reported in an area extending 0.4 mile S of the light and up to 0.4 mile offshore. In August 1994, the controlling depth was 5½ feet across the bar, thence 6½ feet to Port Vincent, and thence 4½ feet to the junction with its tributary Bayou Manchac about 31 miles above the mouth. Above a point about 12 miles above the mouth there are overhanging trees and snags. Overhead power cables crossing Amite River about 0.1 mile, 2.6 miles, 3.0 miles, and about 13.9 miles above the mouth have clearances of 70 feet, 60 feet, 60 feet, and 42 feet, respectively. Three highway bridges cross the river between the mouth and Port Vincent, about 27 miles above the mouth. The bridge at Clio, about 5 miles above the mouth, has a swing span with a clearance of 4½ feet. The bridge at French Settlement, about 19 miles above the mouth, has a swing span with a clearance of 15 feet. An overhead power cable at this bridge has a clearance of 60

feet. Another overhead power cable crosses the river about 27.6 miles above the mouth; clearance is 70 feet. The bridge at Port Vincent has a swing span with a clearance of 7 feet. (See 117.1 through 117.59 and **117.422**, chapter 2, for drawbridge regulations.)

Berths with water and electricity, gasoline, ice, a launching ramp, and some marine supplies are available at a small marina about 2.5 miles above the mouth of Amite River. Launching ramps are on either side of the river above the highway bridge.

Bayou Manchac joins Amite River about 4.2 miles above Port Vincent. In November 1994, the controlling depth in the bayou was 4 feet for about 5.2 miles. Submerged logs are reported above this point; caution is

Bayou Manchac is crossed by two highway bridges and a railroad trestle. The bridge at Hope Villa, about 5.8 miles above the mouth of the bayou, has a fixed span with a clearance of 11 feet. The Airline Highway (U.S. Route 61) bridge, about 6.5 miles above the mouth, has a fixed span with a width of 30 feet and a clearance of 6 feet, and is at the head of navigation in the bayou. The Louisiana and Arkansas Railroad trestle is about a mile above the Airline highway bridge.

Blind River enters Lake Maurepas 5.7 miles S of Amite River. In August 1994, the controlling depth was 5 feet across the bar, thence 10 feet to the Airline Highway, the head of navigation. A light and a daybeacon mark the best water. Caution is advised when entering the river. Numerous overhead power cables with a least known clearance of 66 feet cross the river.

The Bonnet Carre Floodway is located on the SW (435) side of Lake Pontchartrain. When the spillway is in operation, as a result of high stages of the Mississippi River, vessels in the vicinity of the discharge end are cautioned to be on the lookout for possible logs or stumps that may enter the lake and should give that end a wide berth.

The city limits of New Orleans extend from Lake (436)Pontchartrain to the Mississippi River. Pleasure resorts

and suburbs are on the lake front. A concrete seawall is along the S shore of the lake from the protected yacht harbor about 2 miles E of the Lake Pontchartrain Causeway to Lakefront Airport. The protected yacht harbor, which is entered from E, is just E of the New Orleans city limits.

The Municipal Yacht Harbor is the outer basin, which has direct access to the lake. The Southern and the New Orleans Yacht Clubs, and the New Orleans Power Squadron are in the Municipal Yacht Harbor. There are numerous private beach homes with covered boat slips on the breakwater. The Orleans Marina, owned and controlled by the Levee Board, is the inner basin which has access to the lake through New Basin Canal. In June 1982, the controlling depth in the canal and basins was reported to be about 8 feet. There are several boatyards in Orleans Marina and several marinas along the E bank of New Basin Canal. There are cranes and lifts that can handle craft to 35 tons for hull and engine repairs, or open or covered dry storage. Electronic repairs can be made. Berths for vessels up to 100 feet, electricity, gasoline, diesel fuel, water, ice, marine supplies, and launching ramps are available.

New Orleans Coast Guard Station is close W of the (438) Municipal Yacht Harbor on Lake Pontchartrain.

Lights mark the entrance to the harbor. New Canal (439) **Light** (30°01'36"N., 90°06'48"W.), 52 feet above the water, is shown from a white square tower atop a square dwelling with a red roof on the S side of the entrance; a fog signal is at the light.

Measured course

A measured statute mile on the bearing **084°15'-264°15'** is 2.5 miles E of New Canal Light.

The Lake Pontchartrain entrance to the Inner Harbor Navigation Canal is 4.1 miles E of New Canal Light. An aerolight at the Lakefront Airport is E of the entrance.